

INSIDE DOPE

by GEORGE F. TAUBENECK

Story of the Week
Gags of the Week
Quotes of the Week
Retire Into a Cemetery
What Is Our Defense Problem?
News from the Central Stations

Story of the Week

Brimful of culture, the rich Texan confidently journeyed to Massachusetts to visit relatives. At the first cousin's farm he visited he was introduced to all the children.

"Oh!" piped up one little girl. "You're from Texas. We took up a collection in church last year to send missionaries down there."

Gags of the Week

Saddest words in the American language:

"Plus tax."

Rare books: those which borrowers return to you.

"What every woman wants is security and a chance to play with insecurity."—*Enos Magazine*.

Dumbella says her boyfriend is a washout. When she tells him to stop, he does.

Uneasy lies the head that wears the frown.

When you feel dog-tired at night, it may be because you growled all day.

Quotes of the Week

"Endeavor so to live that when you die the undertaker will be sorry."—MARK TWAIN.

"Every man seems to fall into one of two classifications. He's either old and bent or young and broke."—*Arkansas Baptist*.

"We should live and learn, but instead we live and yearn."—CAREY WILLIAMS.

"I'll see you," said Herman, putting down four aces in a game of strip poker.

"He who laughs last has thought of another joke."—*Polycoq*.

Retire Into a Cemetery

Only one American breadwinner out of four goes for the idea of retiring to a life of complete leisure when he gets old, according to a test taken among typical middle-aged men.

Of 3,000 workers covered in a Northwestern National Life Insurance Co. survey, 24% wanted a life of ease, 39% would like to cut their hours but continue working, and 37% desired to keep right on putting in a full day's work.

Probably the majority is aware that men who retire usually die before they should, and often suddenly.

What Is Our Defense Problem?

The Committee for Economic Development has begun an appraisal of the "complex strategy problem" involved in the threat to our national security, CED Chairman Marion B. Folsom of Rochester, N. Y., reports.

"We believe that this job must not be done entirely by the government. The public must assess the plans of the officials it has charged with the execution of the defense program," declares Mr. Folsom, who is treasurer of the Eastman Kodak Co.

"The existence of a serious threat to our security is clear," Mr. Folsom continues, "but its nature and magnitude are hazy. Our knowledge of activity behind the Iron Curtain is sketchy at best. In this new kind of war, the aggressors do not show their hand, and the defenders must try to figure out what cards they hold."

The American public must give careful consideration to the following questions through full and free discussion.

(Concluded on Page 9, Column 1)

ISSUED EVERY MONDAY AT 430 W. FORT ST., DETROIT 26, MICHIGAN. ESTABLISHED 1926



AIR CONDITIONING & REFRIGERATION News

Vol. 66, No. 5, Serial No. 1211

June 2, 1952

Subscription Price, \$5 Per Year

Second-class matter October 3, 1936 at the post office at Detroit, Michigan, under the Act of March 3, 1879. Trade Mark Registered U. S. Patent Office. Copyright 1952, by Business News Publishing Co.

Industry Leaders Head Speakers at NAED Meeting

NEW YORK CITY—A program featuring top industry executives has been announced for the forthcoming meeting of the Appliance Div. of the National Association of Electrical Distributors.

The meeting will be held Thursday, June 12, during NAED's 44th annual convention in Atlantic City June 8-12. All meeting sessions of the convention will be held in the Chelsea hotel. Headquarters hotel for the convention is the Ambassador.

Scheduled to address the Appliance Div. are Elisha Gray, president of Whirlpool Corp.; Mort Farr, president of the National Appliance & Radio-TV Dealers Association; Alex Lewyt, president of Lewyt Corp.; and B. A. Graham, president of Sunbeam Corp.

Gray will discuss the white goods industry at the morning session. The report of the Radio and Television Committee will be made by Thomas F. Joyce, chairman, at the same session, as will a talk by Farr on "The Distributor's Salesmen."

Balance of this session will be devoted to a panel discussion by the chairmen of the division's commodity committees. In this group will be R. C. Litchfield, Sub-Committee on Kitchen Equipment; G. I. Cohen, Sub-Committee on Laundry Equipment; and H. S. Schiele, chairman of (Concluded on Page 4, Column 5)

Harris Succeeds Keeler As General Manager of I-H Refrigeration Division

EVANSVILLE, Ind.—Promotion of C. D. Harris to general manager of International Harvester Co.'s refrigeration division was announced recently by the company. Harris had been manager of engineering for the division.

He succeeds Mark V. Keeler, who has been named general manager of the company's farm tractor division with offices in Chicago.

Replacing Harris as manager of engineering is F. J. Hausfeld, staff assistant to the works manager in charge of works engineering here. The Evansville works is the manu- (Concluded on Back Page, Column 4)

Mrs. Voice Opposition To 5-Year Warranty, RACCA Survey Finds

NEW YORK CITY—Of all manufacturers who replied to a letter from the Refrigeration & Air Conditioning Contractors Association opposing five-year warranties, only one was in favor of continuing the five-year plan, according to RACCA.

Representatives of the manufacturers have agreed to confer with the group's Trade Relations Committee to see if some method can be found to end the practice, RACCA said.

The association passed a resolution at its last annual meeting in favor of a one-year limit on warranties. George T. Howe, chairman of the Trade Relations Committee, then sent (Concluded on Page 25, Column 4)

Frigidaire Cuts Prices on 12 Of Its Models

DAYTON—Frigidaire Div. of General Motors announced reductions effective May 27 in suggested retail prices of a number of refrigerator and range models, the automatic washer model, and the electric dehumidifier.

Dealers will be rebated for stocks of these models on hand, it was stated.

Prices on six refrigerator models were reduced \$15 to \$45, and the price reductions on four range models were from \$7 to \$18. The automatic washer was reduced \$10 and the dehumidifier \$20.

Biggest change was in an 8-cu. ft. standard model refrigerator that went from \$244.75 to \$199.75.

According to Frigidaire officials the price adjustments were made to keep prices in line with current market conditions and to provide a better stepup pattern between models.

Following are the new and former suggested retail prices on the models on which changes were made:

REFRIGERATORS

Model No.	New Price	Old Price
SR-60	\$189.75	\$214.75
SR-78	199.75	244.75
SR-88	229.75	258.75
DR-97	349.75	364.75
DR-97P	379.75	399.75
DR-114	379.75	399.75

ELECTRIC RANGES

Model No.	New Price	Old Price
RO-10	209.75	227.75
RO-35	219.75	226.75
RO-40	299.75	314.75
RO-20	259.75	274.75

AUTOMATIC WASHER

Model No.	New Price	Old Price
WO-65	299.75	309.75

ELECTRIC DEHUMIDIFIER

Model No.	New Price	Old Price
BO-1	139.95	159.00

Apex Trims \$24, \$18 Off Electric, Gas Drier Prices

CLEVELAND—Price reductions of \$24 on its electric drier and \$18 on its gas drier have been announced by Apex Electrical Mfg. Co. here. Electric drier model 7002 was lowered in price from \$263.95 to \$239.95 and gas drier model 7006 from \$307.95 to \$289.95.

ASHVE Announces Program for June 16 Meeting

SPRING LAKE, N. J.—Eleven papers will be presented at three morning technical sessions during the semi-annual meeting of the American Society of Heating and Ventilating Engineers to be held at the Essex and Sussex hotels here June 16 through 18.

The papers will be devoted to heat flow and heat transfer problems, including heat flow through glass; research in room air distribution; studies on physiological reactions to atmospheric environment; air filtering and air drying.

New Jersey section of the New York chapter of the society will act as host for the meeting with F. H. Faust, of Bloomfield, as general chairman of the committee on arrangements. Prof. E. R. Queer is chairman of the Program and Papers committee.

Highlights of the entertainment program will be the traditional golf tournament for the Research Cup and the Eichberg Memorial Trophy, the semi-annual banquet and a typical Atlantic shore dinner.

H. P. Morehouse is vice chairman of the committee on arrangements. The other committee chairmen are: A. A. Bearman, sessions; W. A. Swain, banquet; R. D. Terhune, entertainment; W. M. Heebner, finance; T. R. Peyrek, ladies; P. B. Gordon, publicity; H. M. Rudio, reception; L. (Concluded on Back Page, Column 2)

Hotpoint Appoints John F. McDaniel Manager of Marketing

CHICAGO—John F. McDaniel, has been promoted to the position of manager of marketing, Hotpoint Inc., John C. Sharp, president, announced. McDaniel formerly was sales manager.

In his new post, McDaniel has responsibility for directing all company marketing activities through a national sales organization including 11 sales districts, 100 distributors, and 11,000 dealers. The marketing function comprises all (Concluded on Back Page, Column 2)



John F. McDaniel

CPR Amendment Gives Ruling on Freezer-Food

Interest, Beef Charges Can't Exceed Ceilings; Requires Itemized Receipts

WASHINGTON, D. C.—The Office of Price Stabilization recently issued its long-awaited ruling pertaining to freezer-food plans.

The ruling, which also applies to other combination appliance-beef deals, is contained in Amendment 4 to Revision 1 of Ceiling Price Regulation 25—"Revised Ceiling Prices of Beef Items Sold at Retail." In a statement of considerations, OPS said the amendment:

1. Requires the seller of 25 or more pounds of beef sold in connection with the sale of refrigerators or other appliances to provide his customer with an itemized receipt which identifies the prices for the beef.

2. Makes it clear that the regulation prohibits charging interest for the extension of credit in connection with the sale of beef where the interest and the charge for the beef, combined, exceed ceiling prices.

"Recently," OPS said, "many plans have been offered to the public by which refrigerators and other appliances have been sold stocked with beef and other meat items. In almost all cases, the food sold in conjunction with the appliance has been a large quantity, amounting to at least 25 pounds.

"One of the several problems created by these arrangements has been that of determining what part of the total charges has been for beef. In order to effectively control beef prices and prevent evasion of the regulation, it is necessary for the consumer to know what part of such a combined bill relates to the beef items."

Therefore, OPS said, it is requiring that freezer-food customers be provided with an itemized receipt identifying the beef prices.

Changes effected by Amendment 4 (Concluded on Back Page, Column 1)

NPA Ups 3rd Quarter Metals Allotments

WASHINGTON, D. C.—Aluminum allotments to most consumer durable goods manufacturers for the third quarter will be 50% higher than in the second quarter, the National Production Authority announced recently. Steel allotments will be up 10% and copper 15%.

This means that these manufacturers will be able to use in the third quarter 55% of the steel, 35% of the brass mill and foundry products, 40% of the copper wire mill products, and 45% of the aluminum that they used in the base period.

Products that are considered by NPA to be less essential—this includes household radio receivers and television sets—will be allotted only 20% to 30% of the copper used in the base period.

IN THIS ISSUE

Low Temp. Storage of Money Delays	
Crystallization	5
Customers Come Back to Dealer Who Services What He Sells	6
'Sit-Down Counter' Helps Close Many Sales in One Sitting	7
Distributor's Direct Mail Campaign Contains Ideas Adaptable at Retail Level	8
Super Market Institute Convention Presented in Words and Pictures 10, 11, & 12	
Commonwealth Edison Launches Room Cooler Show	13
Modern Refrigeration Makes 'Wonder Drug' Production Possible	15
Los Angeles Produce Shipping Dock Freezes a Million Lbs. of Ice Monthly	16
'Information Please'—Experts Answer Service Questions	17
Stepping Up Product Sales in a Sub-Par Sales Area	19
Telling and Selling	6
Slants on Service	17
Current Literature Available	18
What's New	20
Basic Refrigeration Controls	22
Refrigeration Problems—Automatic Defrosting	24
Patents	26
Government Contracts	27

Chicago Electric Assn. Launches \$50,000 Ad Campaign with 'Mystery Shopper' Competition

CHICAGO—To tie in with a \$50,000 advertising campaign, a "Mystery Shopper" sales-presentation competition is now being conducted as part of the local Electric Association's summer promotion of electric ranges through the Electric Cooking Institute.

A total of \$1,200 in prize money will be awarded over a six-week period for the best electric range sales presentations made by area appliance dealers or their salespeople to a Mystery Shopper.

The competition began the week of May 19 and continues through June 30. It is similar to the one used in connection with the association's 1951-52 electric bedding promotion.

Two prizes of \$20 each are being given out five days a week. Rewards are made in cash and delivered by special messenger. Daily bulletins announce names of winners and tell how they "sold" the Mystery Shopper.

Dealers do not know who the shopper is or when she will call. A mailing piece on the stunt told dealers they would be on the way to winning \$20 from the shopper if they can answer these questions:

"Why is electric cooking cleaner? Why is electric cooking cooler? Why is electric cooking the only fully automatic cooking? Why is electric cooking fast? Why is electric cooking considered the most modern?"

Highlights of the electric range promotion were presented at a "Cry-

In-Your-Ber" party held in Edison Assembly Hall in mid-May. Over 300 dealer and distributor personnel attended.

C. C. Simpson, association managing director, pointed out that the "beer" was symbolic only, due to the 8:15 a.m. starting hour. A continental breakfast was served instead.

During the one-hour meeting which followed, B. G. Harrington, manager of the Electric Cooking Institute, acted as master of ceremonies. W. T. Reace, vice president of Commonwealth Edison, presented the utility point of view regarding movement of electric ranges through dealer outlets.

Electric Association President Harry Alter and R. Douglass Cooper of R. Cooper, Jr., Inc., chairman of the ECI management committee, discussed the \$50,000 traffic-building advertising campaign. They asked for greater dealer cooperation in improving the range sales picture.

Advertising in metropolitan and suburban newspapers started May 1 and will continue through June 15. Theme of the ad campaign is "Go Modern... Cook Electrically." One of the early ads was headlined: "Cleaning is a constant chore when you have an old stove!... Change to clean electric cooking!"

Also presented at the meeting was a skit dramatizing what can happen when the Mystery Shopper visits a dealer's store.

OPS Moves To Force Chains To Correct Pricing Charts

WASHINGTON, D. C.—Some 200 chain stores, including some that handle appliances and television, are faced with legal action by the Office of Price Stabilization to compel the correction of incorrect pricing charts already filed with the OPS national office.

OPS alleges that these firms have ignored repeated letters and warnings to file correct pricing charts in place of the incorrect charts already filed.

McCombs Alters Name To Cover New Lines

DENVER—McCombs Supply Co. is the new name adopted by the refrigeration equipment wholesaler formerly known as McCombs Refrigeration Supply Co. here.

In a letter to customers, H. R. McCombs explained that "we have now progressed to a point where we feel that due to the addition of other allied lines that we distribute, the name McCombs Supply Co. describes our business more accurately."

"These additional lines in no way affect our position as a refrigeration parts and supply wholesaler. They are allied to the refrigeration business. For example, air conditioning equipment and supplies, air handling equipment such as fans, grilles, registers, diffusers, filters, electric motors and parts, Market Forge shelving, etc., which will be shown in our new catalog that is in the process of being printed."

Revco Launches Big Ad Program on 'Chill Chest'

DEERFIELD, Mich.—Revco, Inc. here, manufacturer of the "Chill Chest" line of food freezers, announced that it is launching a nine-area newspaper and radio promotion program the week of June 1.

John W. Rietzke, sales promotion manager, said the program of distributor-dealer support advertising will use a series of ads over a 13-week period involving 38,392 lines of newspaper space in the nine areas.

This ad series running in the Sunday editions will be supported by one-minute spots on radio three times weekly during the same period. The radio programs will introduce a new Chill Chest singing commercial.

Distributors and cities chosen for the freezer promotion are Major Appliances, Lansing, Mich.; Toledo Appliances, Toledo; Hamilton Equipment, Harrisburg, Pa.; Leff Electric, McCune & Co., and Furbay Electric in the Akron area; Marlin Associates, Dallas; Wallace Johnston, Memphis; Campbell-Stenson Co., St. Paul; Badger State Distributing, Milwaukee; and Hollander & Co., St. Louis.

The campaign was designed and placed by the Beeson Reichert agency in Toledo.

Terry Farris Dept. Store Opens Appliance Section In Basement

SAN ANTONIO—Terry Farris department store here has opened an appliance department in its basement, in what Harold Katz, store manager, described as the second innovation by the south Texas chain.

The first innovation at the local store went into effect some months ago, when it shifted emphasis to credit selling. Since March 15, Katz pointed out, the store has established some 2,000 budget accounts, which has helped to sell appliances and other home furnishing items.

In the major appliance field, the manager said, the store will handle Whirlpool washers, Estate gas ranges, Gibson and Philco refrigerators, and State sewing machines. Sunbeam electrical appliances also will be stocked. No television is being added as yet. Appliance samples will be displayed on the street floor also.

Roanoke Council Authorizes Bids To Cool Hustings Court

ROANOKE, Va.—City Council has authorized City Manager Arthur S. Owens to prepare specifications and take bids on the air conditioning of hustings courtroom and jury room.

Owens said estimates submitted by a number of contractors and dealers indicated the cost of conditioning hustings, law, and chancery courtrooms would be \$6,500, including water tower.

Specifications for hustings court will include a water tower for recirculation of water, adequate to take care of machinery to be installed later for law and chancery courts.

The city manager, who has considered air conditioning for the three courtrooms on the third floor, including the circuit courtroom in which council meets, told the body he had asked for estimates so that he would have a guide to bring before them.

He recommended that only one courtroom be undertaken this year and that this be hustings because that room lacks any effective means of ventilation.

Owens also discussed informally the question of installing window-type conditioners for other offices, commenting that the council should give due consideration to any such program because of its ultimate cost.

Stores with Self-Service Meats Average 22% More

NEW YORK CITY—Safeway Stores, Inc. reported that remodeled stores with self-service meat departments are averaging sales 22% higher than before modernization.

In the last three years, Safeway has completed modernization of 791 units and 201 more remodeling projects were in progress at the end of 1951.

Convinced that supermarkets will account for an increasing share of grocery sales, Safeway has been concentrating on consolidating stores into fewer but bigger units. It had 2,125 stores in the U. S. and Canada at the close of last year.

If government materials controls do not interfere with its construction program, Safeway believes that "within the foreseeable future," its annual sales will hit \$2,000,000,000. The company expects sales this year to pass \$1,500,000,000.



* to sell SERVEL Supermetlic!

Throughout your area, there's many a tired-out compressor ready to call it quits. Still others are headed for a breakdown during the hot days ahead. Each one offers a sales opportunity for you.

Every Servel Supermetlic you sell means:

- you make a good profit on the sale
- you keep your profit because Servel eliminates costly "nuisance" calls
- you add another satisfied customer who will help make other sales for you

You'll also find your nearby Servel Wholesaler a real sales ally... ready, willing and able to meet your every requirement... with the kind of help that builds your reputation for service. Send coupon for his address and full selling facts TODAY.

YOU CAN SELL SUPERMETRIC FOR EVERY REFRIGERATION NEED!

**Servel
SUPERMETRIC**

Models for every commercial refrigeration and air conditioning use... 1/3 to 3 H.P.

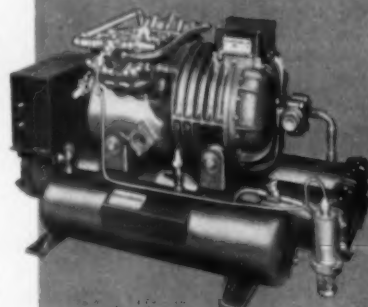
**MAIL
COUPON
TODAY!**

**GET IN TUNE FOR
TOP SUMMER PROFITS**

Servel, Inc.
Electric Refrigeration Division
Department A-62, Evansville 20, Indiana

Send full facts about Servel Supermetlic and name of nearest Wholesale Supplier:

NAME (personal) _____
TITLE _____
COMPANY _____
CITY _____ ZONE _____ STATE _____



Full range of sizes — 1/3 through 3 H.P.
— available with Servel's Low-Cost
Factory-Backed Warranty

BAKERS SAY—"FREEZERS PAY"



Why not cash in on Bakers' enthusiastic reception of the idea of freezing baked goods?

TRAULSEN freezers offer all the advantages of freezing plus outstanding selling features.

SELF-DEFROSTING MULLION COILS OR VERTICAL FREEZER PLATES

- + Stainless Steel Front—Aluminum Body
- + Stainless Steel Pan Slides—1 1/4" Spacing
- + One Piece Welded Aluminum Interior
- + 4" Cork Insulation—Vapor Proofed
- + 92, 138, and 184 Pan Capacity Models
- + Extra-Heavy Spring Brass Strap Hinges—Chrome Plated

OTHER APPLICATIONS
+ Self defrosting models can be equipped with shelves for Restaurant, Hotel and other uses.

Traulsen

45-11 37th Street
Long Island City 1, N. Y.

I'm interested. Please send complete information.

Name _____
Address _____
City _____ Zone _____ State _____

Free Electricity Sparks Range Drive In Buffalo

BUFFALO—Free electricity for an entire year (up to \$18) opened the door to a substantial volume of electric range business for dealers in the Buffalo area who joined with the General Electric Supply Corp., distributor, and the Niagara Mohawk Power Corp., local utility, in sponsoring the promotion.

A spokesman for General Electric Supply described initial response to the promotion as "very good," stating that dealers were "amazed" at the amount of consumer interest created.

One dealer was reported to have sold five electric ranges under the plan in one day. Ninety per cent of the General Electric dealers in the area were reported participating in the promotion and General Electric Supply said it moved a substantial number of ranges into dealer channels in preparation for the event.

The limited time event was scheduled for a 30-day period and was launched with a striking full page newspaper ad which spotlighted the "lowest price ever for a General Electric range—\$189.95, and we pay for the electricity used by the range for a full year."

Planning behind the promotion was to convince consumers that the cost of operating an electric range actually is not as high as most people believe.

Here is the way the deal was explained in the ad: "An electric range is always cleaner, safer, and more efficient than fuel type ranges, and it costs so little to operate. Yes, electric cooking costs only \$1.50 per month, average, for a family of four. And now your General Electric dealer agrees to pay for this amount of electricity for a full year when you take advantage of the sensational offer in this advertisement."

"General Electric has always offered the best range value on the market. Now, with a new low price and the electricity used by the range paid for a full year the value is even greater than ever before. Buy your G-E range tonight or tomorrow at any of the General Electric dealers listed below."

Each range buyer received a "Range Owner's Coupon Book." The book contained 12 coupons, each good for \$1.50, in payment for electric power from Niagara Mohawk used by any G-E range. The coupon was used in payment at designated offices of the power company.

Over-Cooling Prevented By Modulation Control

YORK, Pa.—"Modulation control," a system capacity adjusting device for automatically preventing a room air conditioner from over-cooling when outdoor temperature drops, has been introduced by York Corp. here.

A dial located on the cabinet of the unit permits the desired amount of cooling to be selected. After the air conditioner is started, modulation control automatically adjusts the cooling capacity to avoid over-cooling and maintain the selected comfort level.

Whenever the outside temperature drops, the control automatically reduces the amount of cooling without changing ventilation or air circulation. Should outside temperature rise, the control then increases cooling until the predetermined comfort level is attained.

In either event the room conditioner will continue removing humidity without changing ventilation or air circulation.

An optional accessory for ½-hp. York room air conditioners, modulation control will retail for about \$20. It is standard on 1-hp. York window-type units.

AIR CONDITIONERS
3 to 50 Ton Units complete with evaporative condensers
BAL-AIR MANUFACTURERS
P. O. BOX 576
COLUMBIA, S. C.

Store Sued for \$24,000 Over 'Hot' Used Box

LINCOLN, Neb.—A Lincoln housewife has filed a \$24,228 damage suit against Gold & Co., charging the Lincoln department store with selling her an allegedly defective used refrigerator which, she claims, caught fire twice in her home.

The suit, filed in Lancaster County District Court, stated that Mrs. Conners bought the appliance last February, and since that time it has allegedly caused \$996 damage to the interior of her home, \$1,233 damage to furnishings, and \$22,000 damage to herself through illness.

Goodwin Will Represent Selmix In Detroit Area

LONG ISLAND CITY, N. Y.—James Goodwin of Goodwin & Co., Detroit, is a new representative for Selmix Dispenser, Inc., company officials have announced.

He will represent the firm on its carbonator and beverage dispensers.

Target—Price Cutting Wave

20 Dealers Join Distributor's Campaign To Sell Product Quality and Performance

OMAHA, Neb.—A test group of 20 major appliance dealers from the Omaha-Lincoln-Sioux City area has been organized by Bi-States Distributing Corp. of Omaha, distributor for Admiral products, to wage a sales campaign based on quality and performance rather than price.

The event is designed as a counter-attack against price cutting in refrigerators and other major appliances in the area, according to Lloyd W. Sleszer, general manager of Bi-States.

The following points have been agreed upon by these dealers:

1. The entire organization in each dealer's store will sit down at the close of the day's work, and talk Admiral refrigerator for two hours with a representative from Bi-States.

2. Each customer coming in to each of the 20 stores will be shown the

"Dual-Temp" Admiral refrigerator in operation, stocked with food.

3. To trim a window showing the Admiral refrigerator, and to keep the display for two weeks.

4. To run newspaper advertising on a cooperative basis with Bi-States.

Sleszer said that in a preliminary experiment conducted for two weeks, during which time only the value of the product itself was stressed, more Admiral Dual Temp, flash defrosting refrigerators were sold than in the previous three months.

There will also be two full-page ads and three 1,000 line ads each Sunday during May and the forepart of June in the leading newspapers of the area, in which the test dealers will be listed, in order to experiment by giving a product story. This ad program ties in with the "Dollar Shower" national Admiral contest.

Display windows of the cooperating dealers will be photographed and entered in the national contest as a bonus for participating in the test.

The campaign will continue for 13 weeks, and was launched recently at the Athletic Club in Omaha, where a cocktail party honoring Seymour Mintz, national director of advertising for Admiral Corp., was followed by a dinner at the Blackstone hotel.

Cooperating in the campaign are: Fleischer Electric, Allen Appliance, Paramount Radio Shop, Sol Lewis Appliances, all of Omaha; Kollar's Appliance, Kelly's Housekeeping Shop, Gourley Bros., and Crescent Jewelry & Appliances, all of Lincoln; Bellevue Appliance Store, Bellevue, Neb.; Home Appliance Co., Columbus, Neb.; Kavich Furniture Co., Fremont, Neb.; Steinbaugh & Hansen, Blair, Neb.; Kroils Radio & Television, Nebraska City, Neb.; Smitty's & Webster's Appliance Store, Tekamah, Neb.; Walt Nielsen, Walthill, Neb.; Broadway Appliance Co. and Oden's, both of Council Bluffs, Iowa; Cherokee Radio Laboratory, Cherokee, Iowa; Marten's Western Auto, Denison, Iowa, and Thayer's, Inc., Sioux City, Iowa.



Here's how to **SELL**

WESTINGHOUSE WATER COOLERS

... of course, it's electric!

Proof of the statement *Blue Chip Line of the Industry* is established by the outstanding percentage of the industry sales which Westinghouse obtained in 1951. And since it's always easier to sell the leader, you'll want to join up for Dealer profits.

You'll find that Westinghouse is with you all the way. In addition to our big advertising program, we have a kit full of Dealer Helps for your local promotion activities. So stock up now. Ask for our *How-To-Sell Helps*: Form No. 2WC-2301. See your Distributor or use the coupon at the right.

YOU'LL FIND IT PAYS TO SELL
Westinghouse



... to sell the leader

WESTINGHOUSE ELECTRIC CORPORATION
Electric Appliance Division • Springfield 2, Mass.

For further information on franchise openings and *How-To-Sell Helps* (2WC-2301) call your Distributor or mail this coupon.

Name _____
Street _____
City _____
State _____

YOU CAN BE SURE... IF IT'S
Westinghouse



William F. Niemeo, sales promotion manager, Kelvinator Div., Nash-Kelvinator Sales Corp., Chicago, points to handy defrost knob, as he explains the "Magic Cycle" to Jean Nevin.

Kelvinator 'Displa-Mobile' Promotes Magic Cycle Defrost at Point of Sale

DETROIT—A mobile overhead display that moves without mechanical devices is being used by Kelvinator dealers to feature the new "Magic Cycle" self-defrosting method.

The point-of-sale display is the "Displa-Mobile," created by Berger-Amour, Chicago display producer.

Made up of seven coordinated, finely balanced parts, the "Displa-Mobile" rotates in a circular motion suggesting the defrosting cycle. Each part is shaped to pass through the area occupied by its neighbor. This inter-weaving action draws the attention to the company's products.

The display is suspended from the ceiling so that it is not in the way on the sales floor or on the counter. Dealers say the device helps them tell their sales story and bring out strong selling points as each card turns slowly, attracting customer's attention with color and motion.

New in the refrigeration field as a major promotion piece, the "Displa-Mobile" has been used successfully in other fields. Much of this success is due to the fact that the "Displa-Mobile" can be made up into a few or several parts, whatever is needed to tell the sales story.

Burge Ice Machine Co. Celebrates 50th Year

CHICAGO—One of the oldest firms in the refrigeration industry, Burge Ice Machine Co. here, is celebrating its 50th anniversary this year.

E. H. Burge organized the firm way back in 1902 and six years later became a distributor for what was then the Baker Ice Machine Co. of Omaha, Neb., in a territory which included Illinois, Indiana, Michigan, and Wisconsin. This association with Baker has continued ever since.

The Burge organization has many "firsts" in its history and participated in the first mechanical refrigeration for railway "reefers." This job was done in cooperation with North American Car Co. and involved a Baker 3½ x 3½ ammonia compressor.

To the many large jobs the firm has installed through the years can be added one just completed: 2,756,000 cu. ft. of cold storage space which includes -10° and -20° rooms for Continental Freezer Co. of Chicago.

Service Unit Gives Sunroc Big Water Cooler Contract

GLEN RIDGE, Pa.—The U. S. Marine Corps has awarded a contract in the approximate amount of a quarter million dollars to the Sunroc Co. here for the manufacture of a large quantity of electric water coolers.

In announcing the award, Orville Morrison, president of Sunroc, said the contract covered both bubbler and cafeteria types for both foreign and domestic installation.

Bus Service Again Offered Buyers at Home Furnishing Market, June 16-20

CHICAGO—Free bus service for buyers attending the International Home Furnishings Market in The Merchandise Mart will again be provided by the building during the first five days of the market, from Monday, June 16, through Friday, June 20.

Banner-bedecked busses marked "Merchandise Mart Buyers' Courtesy Bus" will run daily from the Loop hotels to The Mart in the morning from 7:30 a.m. until 10 a.m. at 10-minute intervals, and from The Mart back to various hotels in the Loop at 10-minute intervals during the afternoon from 4 p.m. until 6 p.m.

In addition, the busses will run between The Merchandise Mart and the American Furniture Mart at half-hour intervals between 10 a.m. and 4 p.m.

The route provides transportation for buyers at the following hotels: Congress, Conrad Hilton, Blackstone, Palmer House, Morrison, Chicagoan, and the Sherman. Buyers staying at other hotels in the Loop area may board The Merchandise Mart courtesy busses at the nearest hotel covered by the morning route.

J. C. Wagner Quits Ward; Headed Household Items

CHICAGO—Resignation of J. C. Wagner as vice president in charge of household lines for Montgomery Ward & Co. was made known here recently. He had been with the company for 17 years.

At the same time, the company announced that its household lines department will be consolidated with the hard lines division under J. A. Webber. Webber has been in charge of buying and marketing durable items not included in the household furnishings division.

Both Wagner and Webber were appointed vice presidents in 1949.

April Washer Sales Decline From March and Year Ago

CHICAGO—The American Home Laundry Manufacturers' Association reported that factory sales of standard-size household washers in April totaled 217,211 units, a decline of 12.6% from the March figure and 25.7% under the year-ago total of 292,193.

April sales of automatic tumbler driers aggregated 36,109 units, 12.3% below March but up 9.6% from April, 1951.

NAED Program--

(Concluded from Page 1, Column 2) the association's Major Appliance Committee.

An innovation at the convention will be the Appliance Div. luncheon to be held in the Wedgewood Room of the Hotel Chelsea. Lewyt will be the luncheon speaker.

Immediately following the luncheon will be a program specially arranged by Samuel F. Fingruld, chairman of NAED's Electric Housewares Committee. This will include a professional presentation sponsored by the Electric Housewares Section of NEMA.

The session will close with an address on fair trade problems by Graham.

NAED's Apparatus and Supply Div. will meet the afternoons of June 9 and 10. One of the speakers at the June 10 session will be George F. Hessler, vice president of Graybar Electric Co. and a member of NAED's Executive Committee, who will analyze the electrical distributing industry in a talk entitled "Distribution Is of Age."

Keynote speaker at the general convention session on Wednesday morning, June 11, will be Lowell B. Mason, a member of the Federal Trade Commission. W. G. Peirce, Jr., president of NAED, and Chas. G. Pyle, executive director of the association, will also address this session.

A feature of the convention will be the Conference Booth Center at the Ambassador hotel, where more than 200 booths will be located. The center will be open from 1 p.m. to 5 p.m. on Sunday, June 8; from 9 a.m. to noon and from 4:30 p.m. to 6:30 p.m. on Monday and Tuesday; and from 3:30 p.m. to 6:30 p.m. on Wednesday.

Australian Firm To Make U. S. Laundry Equipment

NEW YORK CITY—Kelvinator Ltd. of Keswick, South Australia, has purchased a new factory where it will manufacture American washing machines and other home laundry equipment under an agreement with a U. S. company, according to the Australian News and Information Bureau.

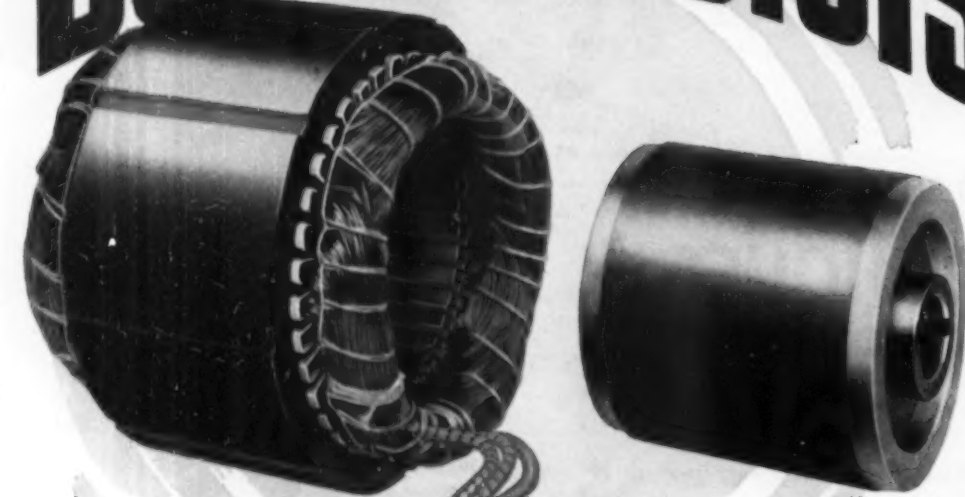
The bureau said the Australian company is one of the leading manufacturers in that country of domestic and commercial refrigerators.

MORE INFORMATION?

Use Handy Coupon on "What's New" Page of this issue.

For commercial air conditioning and refrigeration . . .

SPECIFY Delco HERMETIC INTEGRAL H.P. Motors



THE BEST RUNNING MATE YOUR PRODUCT CAN HAVE!



DELCO PRODUCTS

DIVISION OF GENERAL MOTORS CORPORATION
DAYTON, OHIO

Delco Hermetic Integral H.P. motors are setting the pace in today's trend toward larger hermetically sealed refrigeration systems.

The Delco rotor-stator design means durable, efficient motors insuring longer life . . . less maintenance. Sealed refrigeration systems with Delco hermetic motors are quiet . . . capable of providing the most efficient, low operating cost refrigeration for all types of load and temperature requirements.

Delco motors give you all these advantages and also permit you to make significant savings in manufacturing costs.

Yes . . . it pays to specify Delco integral h.p. hermetic motors for commercial refrigeration units, retail store air conditioning systems, and the like. For complete information, write to Delco Products, Dayton, Ohio, or call the nearest sales office listed below.

Sales Offices: Atlanta • Chicago • Cincinnati • Cleveland • Dallas • Detroit • Hartford • Philadelphia • St. Louis • San Francisco

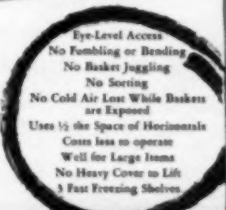
BARKOW!

the name that stands for FREEZER!

Announces

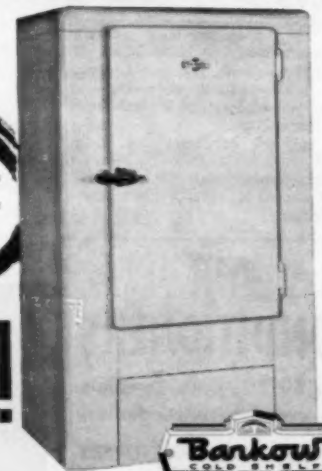
A NEW 20 CU. FT. VERTICAL!

the Barkow is the nation's finest vertical and verticals are the way to profits!



BEST!

the best deal for you on every score. Write—wire—or phone today for information on distributorships and dealerships!



AUGUST G. BARKOW MFG. CO. 2230 S. 43RD STREET, MILWAUKEE, WIS.

Low Temp. Honey Storage Prevents Crystallization

OTTAWA, Ont., Can.—Refrigerated storage of liquid honey prevents crystallization for a considerable length of time. It has been found by G. H. Austin and C. A. Jamieson of the Apiculture Div., Experimental Farm here, according to the Refrigeration Research Foundation.

In general practice it is necessary to reliquify and repack honey that crystallizes before it is retailed, so samples of a naturally fast-granulating honey were stored under three different temperatures: 57°, 32°, and 0° F.

When samples held at 57° began to develop crystals, groups of samples were removed from 32° storage and placed in the 57° space, where it was found that crystallization was delayed.

Honey that crystallized in one month at 57° remained free of crystals for eight months at 32° F., it was found, and 0° storage was even more effective.

Preliminary tests would indicate, it was said, that honey which has been liquefied under the more drastic heat treatment of pasteurization should keep well at 32° F.

Radiant Floor Coils Warm Workers In 50° Room

CASHMERE VALLEY, Wash.—How to keep employees contented when they have to work in a refrigerated room?

That was the problem confronting operators of the Cashmere Fruit Growers' Union plant here.

To keep fruit in picked-fresh condition, temperatures in the Union's building must be held at approximately 50° F. Because of this, workers in the processing areas constantly complained of cold feet and said they contracted colds by working in the room.

A solution was reached when the operators installed radiant heating coils of wrought iron pipe beneath the floors of their work areas. Steam is circulated through the coils. The result is that employees are kept comfortable, even though the radiant heating system has little effect on the temperature of the air in the building.

The Cashmere Fruit Growers' Union has a membership of some 80 growers. Its yearly output is approximately 600,000 packed boxes of apples and winter pears, plus 1,500 tons of cannery Bartlett pears.

'Caribbean Day' Celebrated When 26 Carloads of Norge Refrigerators 'Go South'

MUSKEGON HEIGHTS, Mich.—It was "Caribbean Day" here recently when a special train of 26 gaily bannered freight cars moved out of the Norge plant there with 2,200 refrigerators, en route to Cuba, Puerto Rico, Venezuela, and Panama.

The half-million dollar load was a record shipment of Norge refrigerators into the Caribbean area, according to J. W. DeLind, Jr., president of Borg-Warner International Corp.

Present at ceremonies marking the departure of the train were Anibal Gomez Ortega, Norge distributor in Caracas, Venezuela; Jaime Torres, of North Electric Co., a Puerto Rican distributing concern; Mr. Garcia of Cuba Electric Co., Havana; A. E. Brodigan, Caribbean regional representative of Borg-Warner International; and DeLind.

Motion pictures of the take-off of the train and of the manufacture of Norge refrigerators will be exhibited in Latin American countries.

Church Spends \$24,225 To Air Condition Auditorium

GREER, S. C.—The main auditorium of the First Baptist Church here will be air conditioned at a cost of \$24,225.

According to the Rev. J. Roy Robinson, pastor, the latest improvement will bring to more than \$300,000 the money spent on the church within the past 18 months.

Installation of the air conditioning system will begin at an early date. V. D. Ramsauer & Sons, of Greenville, has the contract.

Electricity for Refrigeration, Freezing On Farms Discussed at Neb. REA School

LINCOLN, Neb.—The use of electricity for refrigeration and freezing on the farm was the featured subject at a four-day training school conducted at the University of Nebraska College of Agriculture by the power use and education committee of the Nebraska Rural Electric Association.

President R. C. Johnson of Mead pointed out the tremendous changes which rural electrification have brought to Nebraska farm living in the short space of 15 years, and he declared that refrigeration and freezing have become as important to the farmer as his tractor.

The newer types of home food freezers and the new uses to which these appliances are put were of particular interest at the demonstration techniques and electric refrigeration service school.

M. L. Mumgaard, University of Nebraska farm electrification specialist, described the walk-in freezer as the "ultimate in farm refrigeration," and pointed out that while this type of refrigerator is not new, it is just beginning to move to the farm.

A model two-temperature walk-in for farm use was demonstrated at the Agricultural Engineering building. It consisted of a compartment of approximately 250 cu. ft. for chilling and storing meats and other foods, and a low temperature room of about 100 cu. ft. for freezing.

Approximate dimensions were 8 ft. and 8 in. long, 10 ft. and 7½ in.

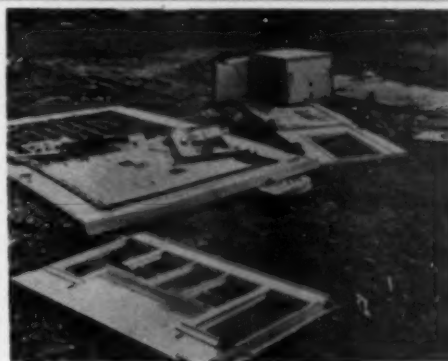
deep, and 8 ft. high. Mumgaard explained that it could be built inside another building or outside with addition of siding and roof.

Approximate cost of the walk-in at last year's prices was placed at \$1,200, divided about equally between building materials and refrigeration equipment. In a surrounding temperature of 70° F., it would use approximately 200 kwh. per month, it was stated. The chill room would cool one beef or one large hog or 600 lbs. of other produce at one time. The freezer room would freeze 100 lbs. per day.

Kenrow, Inc. Represents Deepfreeze In Georgia

NORTH CHICAGO, Ill.—Appointment of Kenrow, Inc., 451 Bishop St., N. W., Atlanta, as exclusive Deepfreeze distributor for the state of Georgia has been announced by Ben G. Sanderson, general sales manager for the Deepfreeze Appliance Div., Motor Products Corp.

Under Vance C. Woodcox, president, and W. Franklin Manus, general sales manager, Kenrow plans an intensive promotion and merchandising campaign for Deepfreeze home freezers and refrigerators among its Georgia retail outlets. The distributing organization has 10 salesmen in the field.



WRECKAGE around Lingle walk-in cooler is mute evidence of the beating that the cooler must have taken. However, it survived the tornado in good shape as did its four occupants, who probably owe their lives to its sturdy construction.

Store Collapses In Arkansas Tornado But Walk-In Cooler Stays Whole To Save 4 Lives

BALD KNOB, Ark.—People ordinarily aren't happy over spending some time in the cooler.

But four local residents are—for the cooler, one of the refrigerated walk-in variety, probably saved their lives.

It happened late one afternoon last March when a tornado struck this town without warning. It was the same vicious twister that injured and killed thousands in Arkansas and other states in the region.

One of the places in the path of the tornado was a Dairy Queen store here owned and operated by Joe Henry. When the storm hit, the first thought of Henry, his wife, their son David, and Kenneth Davidson was to get into the walk-in for safety. And it was a good thought, too, be-

cause the building was completely flattened by the big wind.

The Henrys and Davidson came through the blow unscathed except for a few bruises suffered when the cooler rolled over several times. Despite the abuse it took, so did the walk-in, a product of Lingle Refrigerator Co., Inc., Kansas City, Mo.

Lingle had always felt that its walk-ins are pretty ruggedly constructed. But, commented Sales Representative Dale Neal, "we never realized that a Lingle walk-in would replace a storm cellar. We are very proud of our cooler that looks so good after so much abuse."

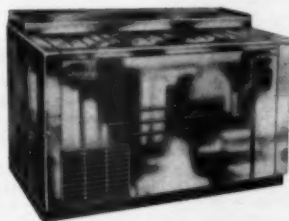
Henry praised the walk-in very highly, too, Neal reported, adding: "And you can see why he would." Yes, indeed!



SUPREME BOTTLE COOLERS



SELF-CONTAINED BLUEBIRD BOTTLE COOLERS



STAINLESS STEEL DRAINBOARDS



DIRECT DRAWS



BOTTLE COOLERS WITH UTILITY HOUSINGS



REACH-INS



ICE CUBE MAKERS



ESKIMO CUBE MAKERS

THERE'S NO GUESS WORK WHEN YOU CHOOSE LA CROSSE

NEW - 5 YEAR WARRANTY (OPTIONAL)

LA CROSSE leads again with a NEW 5 Year OPTIONAL Warranty Plan on sealed condensing units installed in LA CROSSE equipment at the factory. You now are able to offer the 5 year warranty to customers who want the additional protection at small cost. The optional 5 year warranty provides you with an additional sales tool when selling LA CROSSE products. WRITE FACTORY FOR DETAILS.

follow the leader in quality refrigeration

LA CROSSE COOLER CO.

many other models also immediately available

DEALERS WRITE TODAY

Factory and Gen'l Offices: 2801 Losey Blvd. S. La Crosse, Wis.
Export Office: 80 Broad St. New York City.
Cable Address: Eximpor



BASEMENT SERVICE department of Foulke & Underwood, Madison, Wis., will tackle almost any type of appliance repair. Keeps customers coming back, they claim.

Customers Will Come Back When They Know You Service What You Sell

MADISON, Wis.—Many an additional sales has been closed by the Foulke & Underwood hardware store here because it's willing to tackle just about any sort of repair work in its line—from major appliances down to rods and reels.

Ever since the store was opened more than 10 years ago, owners Norman Foulke and Roy Underwood have always maintained a live-wire service shop. Located in the basement of the store, this complete shop has helped to swell store traffic and bring customers back time and again because "people like to do business with a firm which services what it sells."

Says Underwood: "An efficient service department is a splendid contact medium with customers and prospects. We can trace many sales to that department. It is a new-business source which always comes up with tips every month of the year."

This service is promoted, among other ways, by signs on the stairway leading to the shop. During the basketball season, Foulke & Underwood joins other merchants in sponsoring the broadcasts of Madison East high school games over WKOW. The store's commercials on this program call attention to the service department. And the department is played up at the annual East Side Festival.



A guide to smart advertising and merchandising practices.

This series of articles comprising ideas and principles for the small retail or manufacturing business is written by James D. Woolf, who was for more than 20 years a vice president and director of J. Walter Thompson Co., one of the largest advertising agencies. Out of his experience embracing all types of advertising and merchandising he brings his counsel to the small businessman.

By James D. Woolf

For more than four years "Salesense in Advertising" has been a regular monthly feature in some 25 trade journals. These periodicals have a considerable circulation among small businesses that must get along without the benefit of professional advertising counsel. My mail brings me an occasional letter of despair from such as these.

"It's all too complex for me," writes the president of a small bank in California. "I've been reading some textbooks on advertising lately, and I've got to confess that the stuff is over my head."

I can understand his bewilderment. There is a lot of "scientific" poppycock written about advertising that is over my head, too. What I have always thought of being essentially a pretty simple business is being made to appear as complicated as the digging of a pipeline's Big-Incher.

Do you know what a "synoptical leap" is? Are you aware of the fact that "inhibition supplements facilitation"?



(Keep it simple.)

tion"? Does it surprise you to be told that "the metaphysical interpretation of organic predisposition is unscientific"? I have before me a college textbook on advertising that dwells on these matters.

A young man, a graduate of an eastern university, came to me the other day for advice on what advertising is all about. His head was full of jargon about "reflex response" and "emotional congruity." Like the California banker, he was bewildered.

The truth is, there is nothing particularly difficult about advertising. Like personal selling, advertising is not a science and never will be. Certainly it is not literature. No great advertisements in the literary sense have ever been written, and this includes Cadillac's much lauded "The Penalty of Leadership."

In this dramatic atomic age, in which the scientist and the professor are our Number One glamorous boys, research and psychology and the scientific approach have been emphasized, in my judgment, far beyond their true value. Too often the primary function of advertising—the production of words and pictures that make simple salesmen—is likely to be lost sight of.

To the banker and the student I wrote this: What counts most in advertising is plain good judgment and old-fashioned horse sense. Don't worry too much about psychology and research and all the "scientific" services that have attached themselves to the coattails of advertising. Then I quoted to them an opinion by J. Richard Brown, the able editor of *Southwestern Advertising and Marketing*:

"Between action based on good judgment or action based on research we'll take good judgment every time. For some reason or other, it seems businessmen are getting so they cannot make a product or a marketing

change without submitting it to the people—without taking slide rule or tabulating machine advice on what to do . . . Where research is intended as a substitute for judgment, not only much time is lost but many false premises will be the end result."

To the many proprietors of small businesses who write me I say this: Don't try to do it the hard way. Keep it simple. If you run a store and write your own advertising, talk to people in your copy the way you talk to your customers when you are behind your counter.

If you are the manufacturer of a product, tell the public in sincere and simple words why and how your product will benefit them. Think of your store or your product in terms of people's problems, anxieties, needs, hankerings.

If you are in business and smart enough to get along, you won't need a psychologist to tell you what people's problems are. The only textbooks on psychology you need are the people around you every day.

Make your copy informative and factual. If you need a pattern to follow, consult the pages of the Sears and Ward catalogs. Facts are more persuasive than fancy writing.

Tell the truth—acrupulously. Over the long haul your business will derive great benefits from honest advertising. Don't promise more than you can perform.

Avoid such bombastic adjectives as "Amazing!" and "Astounding!" There is no commercial product in the world that deserves such paeans of praise. Have you ever bought anything that amazed you?

Be helpful. Show sympathy and understanding, an awareness that life burdens the hearts of many people. Kindness and fellow-feeling are qualities too rare in today's bitterly competitive advertising.

Promise satisfaction and back it up with an absolute money-back guarantee. Do this in every ad you run. It's the most important single thing you can do to put salesense in your advertising.



("Promise satisfaction and back it up with money-back guarantee.")

Above all, don't try to be "clever." cute. Don't subscribe to syndicated advertising services, especially those smart-alecky and allegedly humorous boiler plate horrors, usually badly drawn cartoons, that are one of advertising's greatest afflictions.

If there is an advertising practitioner in your town, a man or woman of integrity and good judgment, hire him. If there isn't, write your advertising yourself.

Stick to the principles outlined here and you'll do all right. I didn't originate them. I have simply drawn them out of experience.

DECIDE FOR YOURSELF!

...Compare **TEMPRITE** with ANY OTHER liquid Cooler

EVERY TEMPRITE is supplied with an infinite pressure control valve. Assures perfect exit temperature . . . ALWAYS!

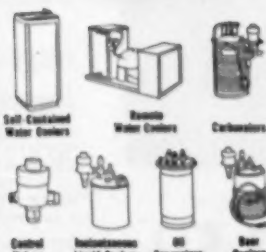
EVERY TEMPRITE is supplied with a liquid control float valve. No additional controls required.

EXTREMELY HIGH CAPACITY through exclusive patented principle! Cooling coils directly submerged in liquid refrigerant and heat transfer is instantaneous through a single wall only! (All coolers rated at 40° exit temperature, but lower or higher temperatures are available . . . without the addition of extra equipment.)

EVERY TEMPRITE is supplied with liquid and suction line shut-off valves, simplifying installation.

LOW-SIDE FLOAT CONTROL assures instantaneous reaction to load, and positive closing on off cycle . . . thus guaranteeing refrigerant flow proportionate to load requirement.

INSTANTLY COOLS water, carbonated drinks, beer, etc., etc. (Copper or stainless steel coils to suit.) Install at roadside stands, drive-ins, taverns, restaurants, fountains, amusement parks, etc. Widely used for industrial and commercial purposes such as photographic and process cooling, etc.



TEMPRITE PRODUCTS CORP. "Be right and Temprite"
P.O. Box 72-A, East Maple Rd.
Birmingham, Michigan

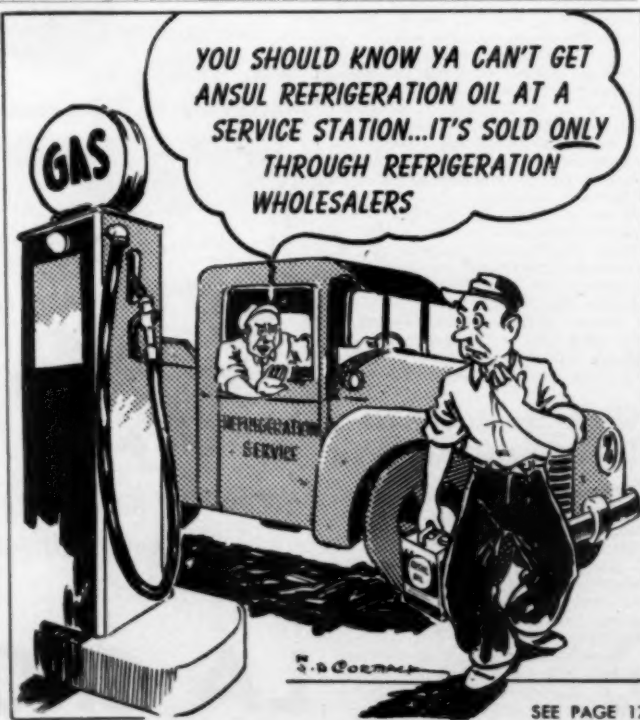
☐ Send me data on Temprite Instantaneous Coolers

☐ Ask your representative to call.

Name _____

Address _____ Zone _____

City _____ State _____



Commercial Refrigeration

3-Temperature Biological Case Impresses Customers, Keeps Drugs at Peak

ATLANTA—A custom-built refrigerator for biologicals which has three compartments, each maintained at a different temperature, has proved superior to the usual domestic refrigerator, reports S. M. Blumenthal, owner of the Reed drugstore here.

The fixture, he says, in addition to being more efficient, impresses customers. More diabetic patrons have been attracted since the store began stressing the fact that refrigeration at a proper degree, carefully maintained, has a lot to do with the potency and efficiency of various drugs.

The big biologicals box is located in the right-rear corner of the store. Its three compartments are maintained at three separate temperatures, which have proved best for such products as penicillin, viruses, anti-toxins, and vaccines.

Temperature in one compartment is kept at 30° F., 35° in another, and 40° in the third.

Sherman, Gasket Expert, Named Orion President

BAY CITY, Mich. — George D. Sherman, a specialist in gasket applications in the refrigeration, automotive, and aviation fields, has been named president of Orion, Inc. here.

Formerly with American Brake-blok Div. of American Brake Shoe Co., Mallory Electric Corp., and U. S. Rubber Co., Sherman was gasket engineer for Wolverine Fabricating & Mfg. Co. for a period of more than 12 years.

Orion has general offices and a fabricating plant in Bay City and a sales office in Detroit.

W. N. Abbott Appointed To Westinghouse Post

SPRINGFIELD, Mass. — Appointment of W. Nelson Abbott as merchandise manager of the refrigeration specialties department of the Westinghouse Electric Appliance Div. was announced by H. F. Hildreth, department manager.



In this capacity, Abbott will supervise nationwide merchandising of water coolers, milk coolers, and the new electric dehumidifiers manufactured here.

The new merchandise manager comes to this post from St. Paul, Minn., where he was sales promotion manager for the Westinghouse Electric Supply Co. Before that he was branch appliance manager at Minneapolis and laundry equipment and range supervisor at Milwaukee for the supply firm.

Abbott first joined Westinghouse here in 1942, serving until he went into the Navy in 1944. He returned in 1946. Abbott studied economics at Princeton university.

Sunroc Gets Water Cooler Contract for Naval Ships

GLEN RIDGE, Pa. — The U. S. Navy has awarded to Sunroc Co. a contract for shipboard type electric drinking water coolers.

The full amount of the contract has not been disclosed, but it is in excess of \$250,000.

Sunroc Co. had previously supplied, during World War II, shipboard type coolers for use aboard vessels from LSTs to ships of the USS Missouri class.

Buy Ice Cream Last Signs Help Supermarket Trade Avoid Disappointment

WACO, Texas—Placing the self-service, low temperature ice cream refrigerators at the extreme end of its "meal-planned shopping circuit" and posting signs which encourage customers to pick it up last, has earned a lot of goodwill for the H. E. Butts supermarket here.

Thad Boyd, manager of the huge store, feels that many ice cream customers have been lost because the purchaser finds the ice cream soft and losing part of its flavor upon arrival home. When such instances occur, the average housewife is likely to feel that the ice cream was not frozen hard enough to begin with.

To forestall such instances, Boyd has placed over the two big reach-in refrigerator cases, a sign which reads, "We suggest you get your ice cream just before checking out!" Most women heed the sign and make the ice cream case their last stop before the cashier rings up their purchases. As a result of this precaution, the ice cream arrives home firm, and at its best.

NCRSA Schedules Chicago Meeting for Sept. 22-23

CHICAGO—Sixth annual convention of the National Commercial Refrigerator Sales Association will be held at the LaSalle hotel here Sept. 22 and 23. The dates were picked to coincide with the Dairy Industries Exposition.



"SIT-DOWN COUNTER" at Turnipseede Refrigeration Co. makes it possible for customer and salesman to sit down to discuss equipment and layout. Shelves under counter keep literature available so salesman need not leave to go for material.

'Sit-Down Counter' Often Makes It Possible For Salesman To Close Sale In One Sitting

WACO, Texas—A powerful selling asset at Turnipseede Refrigeration Co. here is a "sit-down counter" developed by owner Tom Turnipseede for more relaxed and comfortable selling.

When a prospect for either commercial refrigeration or air conditioning is brought in, Turnipseede seats him in any of four bright yellow-chrome-railed chairs around the counter, and seats himself on the other side.

With plenty of space provided for working out plans, laying out sketches, displaying pictures or

catalogs, the customer is often sold in one "sitting."

On tiers of shelving behind the counter are rows of books, reference manuals, manufacturers' catalogs, etc., readily available for answering any questions, so that Turnipseede can handle any problem without leaving the customer.

The sit-down counter was built by the refrigeration mechanics in the shop, and is upholstered in bright green and yellow acrylic plastic.

"It's only a little touch," Turnipseede says, "but it has had a powerful effect on the selling efficiency."

ROTARY SEAL Replacement Units

UNIT No.



8444

Available in a complete range of sizes—including larger models for use in Commercial and Semi-Commercial Compressors, like those listed below. Easy to install • Efficient in operation • Simple in Construction • Economical

BAKER • BRUNNER • CARRIER • COLDSPOOT • COPELAND
CURTIS • FRIGIDAIRE • GENERAL ELECTRIC • KELVINATOR
PAR • UNIVERSAL COOLER • WESTINGHOUSE and many others



AT ALL
LEADING
JOBBER'S

Certainty!"

2020 NORTH LARRABEE STREET
CHICAGO 14, ILLINOIS, U.S.A.
CANADIAN AGENT: 2025 ADDINGTON AVENUE
MONTREAL 28, QUEBEC, CANADA

FOGEL

The Only Original

"ANGLE VISION"

FASTEST SELLING FROZEN FOOD MERCHANDISER ON THE MARKET... Successor to the Flat-Top




Originated and
Manufactured Exclusively by

FOGEL

BUILT UP TO A STANDARD NOT DOWN TO A PRICE!

Priced to Clinch Sales

5 YEAR WARRANTY

The FOGEL "Angle Vision" Freezer is backed by a 5 YEAR COMPRESSOR GUARANTEE! All materials and workmanship are unconditionally guaranteed for quality and backed by over a half-century of FOGEL dependability.

Only "ANGLE VISION" Has All These Features:

MULTI-USE—Self-service frozen food and ice cream merchandiser; check-out counter and display top; bag rack in rear; can be nested in shelving against wall.

ANGLE-VISION FOR GREATER VISIBILITY—More visibility means more frozen food sales. "Angle Vision" is a completely original design.

FULL LENGTH REFLECTING MIRROR and fluorescent lighting doubles buying appeal.

USERS REPORT UP TO 200% INCREASE in frozen food sales.

IDEAL FOR SPACE-CRAMPED STORES where no other freezer could fit.

FOUR MODELS—Unitized or remote types to meet all needs.

FIELD TESTED FOR 10 YEARS—Your assurance of dependability. Protects your sales—protects your profits.

CUSTOMER ACCEPTANCE—An established market. Leads developed through national consumer advertising.

Prompt Delivery

CONTINUOUS PRODUCTION ASSURES
ON TIME DELIVERY, NO DELAYS—
NO LOST SALES.

FOGEL REFRIGERATOR COMPANY

Manufacturers of Quality Commercial Refrigeration Since 1919

3400-A EADOM ST. Philadelphia 27, PA.

Do You Have a 1912 G-E Range? It's Worth a '52 Pushbutton Version In Promotion Stunt

LOUISVILLE, Ky.—Have you an old cast iron General Electric range around—one built say around 1912 and bearing the G-E monogram on the oven door?

If you have, you may be able to get a new 1952 pushbutton single-oven model free.

The company's range and water heater department is looking for about six of the old ranges in good condition suitable for promotional display purposes and is offering the 1952 model in exchange.

One such display, featuring a 1912 range on one platform and a 1952 pushbutton single-oven Airliner range on another platform, already is making the rounds of dealers. Its appearance has been booked solid for some time.

Stretching between the two ranges in the display is a header which reads: "Good then . . . but so much better now."

A factual comparison of the two

ranges is presented on a base panel, with attention drawn to the following message by flashing backlights: Approximate monthly operating cost—Then \$18 . . . Now \$2; Range Efficiency (measured in the time required to bring one quart of water to a boil)—Then 17 minutes . . . Now six minutes; Retail Price—Then \$337.50 . . . Now, \$289.95.

3 Distributors Appointed For 'Time Trol' Switch

NEW YORK CITY—Time Trol Co. here has announced the appointment of Bruno-New York, Inc. as exclusive distributor in the metropolitan area for "Time Trol," the portable air conditioner timer switch.

Other exclusive distributorships for Time Trol were given to Betco, Inc., Louisville, Ky., Philco distributor, and Main-Line Distributors, Toledo and Cleveland, RCA distributors.

specialty SELLING METHODS



UNUSUAL PACKAGE delivered by postman to dealer's store arouses interest of employee Evelyn Wiener, and when her boss lets her open it she finds . . .



. . . THAT IT CONTAINS a tiny ivy plant which was sent by appliance distributor to "plant an idea that will bloom into profits."

Best buy. by far!

...that's why the "triple feature" OASIS is so easy for you to sell!



When your prospect shops around . . . looks for water cooler value . . . and compares water coolers feature for feature—you're going to sell him Oasis! That's because the "triple feature" Oasis gives you these three big sales advantages:

1. NO SQUIRT!

The patented Oasis "Fountain" delivers a smooth-flowing, level drink, regardless of varying water pressures. No unexpected "eye-wash!"



2. DOUBLE CAPACITY!

Even on the hottest days, there's plenty of water from the famous Oasis "Pre-Kooler." It nearly doubles the volume of cooled water served in a given time!



3. QUIET OPERATION!

The fanless Oasis condensing unit not only means fewer moving parts and fewer service problems, but also completely eliminates all fan and fan motor noise!



And when you sell Oasis, you can sell the type and size cooler your customer needs—because Oasis offers a complete line of coolers: 5 to 20 gallons-per-hour capacities, in hand or foot-operated models. Send coupon today for free catalog and details on the fast-selling Oasis line of coolers, and the sensational Oasis Air Drier that stops moisture damage.

OASIS

the world's largest manufacturer of
ELECTRIC DRINKING WATER COOLERS

The Elco Manufacturing Co.
409 W. Town St., Columbus 8, Ohio
Send me the full details on the profits I can make with Oasis Water Coolers and Oasis Air Driers.

Name _____
Firm _____
Address _____
City _____ Zone _____ State _____

Westinghouse Appoints Burkholder to Ad Post

MANSFIELD, Ohio—Appointment of Richard R. Burkholder as electric range advertising supervisor for the Westinghouse Electric Appliance Div. was announced recently by J. R. Clemens, advertising manager.

Burkholder will work on the preparation of all advertising and related materials for the Westinghouse line of electric ranges. He will report to C. N. Preenail, manager of major appliance advertising and sales training.

He began his career with Westinghouse in March, 1949, as an advertising student and became advertising assistant with the laundry equipment department in July, 1949. Prior to his present appointment, he was in charge of developing advertising and promotion of the company's refrigerator trade-in program.



R. R. Burkholder

for our salesmen on prospects who were definitely interested to some degree at least, so the salesmen weren't wasting time," Farr declared.

Five mailings which went out over a period of two-and-a-half weeks were employed by Refrigeration Sales.

The first was a small potted plant of ivy attractively packaged but with no indication on the carton as to its contents. The package naturally aroused interest when received. Upon opening the package, the dealer discovered the plant to which was attached a little tag that read:

"We're going to plant an idea with you. It will bloom into profits. It's all about Norge."

According to Farr, the plant was unusual enough to attract dealers' attention, and it proved especially interesting to the women employed by dealers. And any salesman knows how helpful a secretary or book-keeper can be in suggesting a good time to talk to the boss.

(While the cost of the ivy plant mailing was not as expensive as might be thought, the dealer who wants to do something similar to attract prospects' attention might merely use a packet of flower seeds, Farr suggests.)

The plant was followed by two letters over the signature of J. Lyle Winslow, general manager of the distributorship, both pointing out some of the advantages offered in the Norge line.

Taped to the top of the second letter was a fishing fly to attract attention, and the letter started out:

"On the top of this letter you'll find a fishing lure. In the Norge merchandising package you'll find a customer lure—a lure that will bring you the prize catch of the season."

This was in reference to the Norge "Time-Line" automatic washer. Business reply cards were enclosed with each letter so dealers could request a visit from the distributor's representatives.

Fourth mailing piece aroused dealers' curiosity considerably, it was found. This consisted of a phonograph record, but the label was completely

blank. Dealers put the record on a player and first heard sportscaster Tom Manning describe Babe Ruth's "greatest thrill" (that World Series game where Ruth pointed to a section in the stands and then socked a homer to the very spot). Then followed actual interviews with leading Norge dealers in the territory.

Final mailing piece was set up like a telegram with this message:

"Your district Norge representative wants to give you the complete story on Norge's Silver Jubilee promotion. Return the enclosed card to set up an appointment."

CLEANABLE WATER-COOLED CONDENSERS

More Efficient Double-Tube
Counter-flow Design

1/2 to
25-Ton
Capacity

Acceptance in the field is rapidly changing to "Demand" for these efficient, more economical Cleanable water-cooled Condensers. Owners and service men prefer the "new unit" efficiency that can always be maintained by a simple cleaning process. Brass headers, machined and brazed.

Write for Catalog and Prices
WHOLESALE IN PRINCIPAL CITIES

Halstead & Mitchell
BESSEMER BLDG. PITTSBURGH 22, PA.

There's always one that's better...and in controls it's Ranco!



Ranco controls are the most popular in the Refrigeration Industry. More than 35,000,000 Ranco controls are in use throughout the world. Whether your job involves domestic or commercial refrigeration, remember this . . . Ranco controls are available for over 4,000 replacement installations.

Ranco Inc.
COLUMBUS 7, OHIO



WORLD'S LARGEST MANUFACTURERS OF REFRIGERATION CONTROLS

INSIDE DOPE

GEORGE F. TAUBENBECK

(Concluded from Page 1, Column 1)

1. "What do the Russians hope to accomplish against the free world, and particularly against the United States?" The conclusions drawn from an assessment of Soviet aims and resources must not be one-time conclusions, but must take the form of continuing reappraisal. They must allow for changes in plan made by the Russians for the purpose of making our decisions obsolete and unsuitable.

2. "How much defense do we need?" Having made an assessment of Soviet strength and goals, a comprehensive plan for the defense of our security must be developed. Our immediate goal is to deter the Russians and their satellites from attacking free nations. The total size of our defense effort is only one of many considerations. National security depends not only upon military defense, but also upon a healthy economy, the preservation of individual freedom, and the effectiveness with which we employ non-military security measures—diplomatic, psychological, and economic.

3. "How much should our Allies contribute in manpower, weapons, in raw materials, how much military or quasi-military defense can they build without impairing their precarious domestic economies, how much of America's assistance to them should be military and how much economic?" If we devote too large a share of our resources to weapons production, our long-run solvency will be harmed.

4. "How much should we be doing to help the underdeveloped countries improve their living conditions and production?" Consideration must be given the question of whether the United States in its "zeal to build up military defenses against communism," is devoting enough thought and effort to developing a "positive and constructive program for lasting peace."

5. "Are military authorities planning their forces and weapons to fit the sort of war we might have to fight?" How much of our military expenditure is being devoted to weapons we might be able to use and produce currently or on short notice and how much to designs for the future?

It is of the utmost importance that defense authorities try to establish a program based on a realistic assessment of the threat to our nation. "Without an unbiased study of the threat and the program devised to meet it, the public has no way of knowing whether this requirement has been met. Assuming that the program is properly conceived, there are further doubts that must be resolved. Is there a coordinated plan tying together the different sections

of the security program—military, economic and political, national and international? Are military demands attuned to economic possibilities? Are the plans and schedules that have been drawn up being met?"

Obviously, sensible public appraisal of the success of the defense program depends upon a constant flow of information. Without adequate knowledge of the nature of the threat to our security we leave ourselves open to any number of serious mistakes. We may acquire insufficient defenses or the wrong sort of defense. Or we may overarm and expend such a large part of our resources on military defense that we will weaken our domestic economy, preventing us from helping other free countries from improving their conditions.

The National Security Council should be strengthened with the addition of three full-time civilian members without other governmental responsibilities, one of whom would be responsible for making the flow of information about security matters to the public more effective.

The CED recommends:

1. Strict economy in government expenditure, Federal and local, non-military and military, and the postponement of all deferrable government expenditures.

2. Taxation that will limit the rise in income available for consumers and businesses to spend.

3. Monetary, credit and debt-management policies to restrict the volume of credit and the money supply.

4. A vigorous national campaign to promote savings of all kinds.

News from the Central Stations

Electric utilities plan to double their rate of growth during the next three years, according to industry sources.

In the last two decades their power load has increased at the rate of six per cent annually. Last year they had an 11 per cent capacity margin over peak load. By 1955 it is estimated that their generating plants will be able to carry a load of 110 million kilowatts.

Materials shortages are keeping expansion behind schedules, and defense needs have increased demand; so, in some areas, demand may exceed supply. Less reserve capacity is needed now than formerly, however, because the present network of interconnecting transmission lines makes it possible to transfer power from one locality to another with relative ease.

Electricity generated in the U. S. A. during 1951 totalled 427 billion kilowatt-hours, or 43 per cent of the world's total.

Refrigeration, and home appliances have pushed electrical power expansion, inasmuch as the average home consumed 73 per cent more electric power in 1951 than in 1944.

Air conditioning will be a potent source of further increases in the nation's power output—which underpins the defense program.

Air Conditioning Speeds Dallas Court Procedures; More Due This Summer

DALLAS—A survey to determine the cost of air conditioning the court house and records building was ordered by Commissioners Court recently after County Auditor Moore Lynn told the court:

"The time has come to quit playing around with piecemeal air conditioning. Air conditioning one court at a time costs twice as much."

Lynn said the money for air conditioning county offices is available in the county's permanent improvement fund. He suggested that a check be made to find out if all the offices could be air conditioned through an integrated system.

The auditor made his proposal after the court had rejected a request by a justice of the peace for cooling equipment in his courtroom. At present, the grand jury room, a County Criminal Court, the two Criminal District courts, and one district judge's office are air conditioned.

Lynn's proposal was endorsed by Clyde E. Swallow, vice chairman of the Citizens Traffic Commission, who was appointed to make the survey on air conditioning.

"It has paid dividends in Judge Joe B. Brown's County Criminal Court," he said. "More cases were disposed of last summer than ever before."

Tampa Market Cooled

TAMPA, Fla.—Completely air conditioned, the B & B Super Markets have opened a new unit at 5236 Florida avenue.

50-Year-Old Confectionery Finds Modern Refrigerated Case Keeps Customers Coming



NO MORE SLUMP in summer candy sales for Baur's, famous Denver confectionery. A refrigerated case keeps candy at peak freshness all summer. The firm also features frozen whipped cream specialties.

DENVER—The summer slump in specialty candy sales is a thing of the past at Baur's since the famous old confectionery in downtown Denver installed a refrigerated self-service display case.

Divided into six compartments, the Tyler case occupies a prominent spot in the 50-year-old store. In it are displayed Baur's ice cream, frozen whipped cream delicacies, and packaged bulk candies.

Now, with candies held at low temperatures, sales volume continues at a good pace during the hot months.

Distributor To Operate Trailer with 3 Kitchens

WASHINGTON, D. C.—A 30-ft. display trailer containing three complete kitchens has been put into operation by Douglas Distributing Corp.

Called the "Kitchen Caravan," the trailer will be taken on the road by sales representatives and is also available for use by area dealers at fairs and shows. The trailer houses Geneva, Kitchen Maid, and Douglas Crestlyn kitchens.

MUELLER BRASS CO. DRIERS do a thoroughly effective job of drying and filtering refrigerants

DELUXE—Drying agent sealed in at the factory—under strict laboratory control. Can be filled with any drying agent desired.



REFILLABLE—Just remove inlet plug and inlet screen tube, pour out old drying agent and refill. Replace tube and plug and it's ready for service again.

CARTRIDGE TYPE—Just remove flange cap from inlet end of drier and replace the old cartridge with new dehydrating cartridge which is completely assembled with filter and strainer unit. On side outlet model, cartridge may be replaced without breaking line.



There are Mueller Brass Co. driers available for every type of service. They keep the refrigerant clean and dry, remove the minute particles of foreign matter and they are safe and reliable wherever they are installed. Each of the three types of Mueller Brass Co. Driers shown here have these fine construction features:

- Exclusive cone screen filter-strainer filled with chemically purified wool provides a filter area 5½ times the area of a disc. This filter increases the working life of Mueller Brass Co. driers because it virtually eliminates clogging, insures free flow of the refrigerant at all times.
- Husky forged brass ends are threaded and soldered to the heavy copper shell to provide an extra factor of safety.
- Wide wrench flats make it possible to get tight connections that stay tight.
- A beautiful finish that makes an especially attractive installation in any system.
- Mueller Brass Co. driers are available in sizes from ¼" to 1½" outlets, and desiccant capacities from 3 cu. in. to 242 cu. in.



STREAMLINE refrigeration products are individual and multiple packaged for complete protection. Write for catalog R-152 describing complete line of STREAMLINE refrigeration products.

79

MUELLER BRASS CO. PORT HURON 10, MICHIGAN

IT'S NEW! IT'S ORIGINAL! IT'S FOR YOU!

Designed Especially For Night Clubs, Taverns, Clubs, and many other types of businesses

Equipped with Universal Hermetic Unit

FAST SELLING AND A REAL MONEY-MAKER!

COMBINATION ICE CUBE MAKER-BEVERAGE COOLER-FROSTED GLASSES REFRIGERATION CASE

Stainless Steel with Sliding Doors

- MODEL 1-4 BC-FG. Makes 150 lbs. of ice cubes daily, dry cools 1000 12-oz. bottles daily and frost chills glasses on easily reached shelf.
- POLYETHYLENE ROTO TRAYS Just twist and you have as many ice cubes as you need at any time.
 - 3-INCH INSULATION
 - WATERPROOF TANK
 - STAINLESS STEEL FINISH FRONT
 - 4-5-6-7-8 FT. SIZES, 27" W., 39" H.

For Full Information and Prices Write to:

4-BROTHERS REFRIGERATION MFG. CO.

Factory and Showroom: 1437-31 So. 8TH STREET, PHILADELPHIA 47, PA.
Exclusive Franchise in your Territory available to dealers and distributors. Please write or call.

Frozen Food Fixtures Attract Attention At Super Market Show; 12 Exhibitors Represent Industry

CLEVELAND—Of the 416 exhibits in the record-breaking show held in the Public Auditorium here by the Super Market Institute at its 15th annual convention, an even dozen represented the refrigeration industry.

Ten of these featured only refrigerated fixtures, one with fixtures and air conditioners, and the other air conditioning.

There appeared to be considerable emphasis and interest in open cases for frozen foods, though not to the exclusion of fixtures for other products. As would be expected, no closed display cases were on the floor.

Frozen Foods Interest Supermarket Operator

That frozen foods are becoming increasingly important to the supermarket operator was evident at such booths as Hussmann Refrigeration where much interest centered on a new RL-30 refrigerator for back-room storage of frozen foods.

The basic unit is of 30-cu. ft. capacity, but endless construction design permits two or more storage freezers to be connected together. Exterior measurements are 70½ in. high, 46½ in. wide by 30½ in. deep. Cooling is provided on top, back, and bottom, liners with one plate shelf coil serving as a booster. Other three shelves are adjustable.

Size of freezer permits storage of

frozen foods or ice cream in case lots if desired.

Box is designed for remote installation or semi-hermetic "Freon-22" compressor recommended, but rails are provided on top of refrigerator so that unit may be installed there to save space. A ½-hp. machine is suggested for the 30-cu. ft. size; a ½ hp. for the 60-cu. ft. combination, and a ¾-hp. unit for 90 cu. ft. For heavy-duty service compressor sizes of ½, ¾, and 1 hp. are recommended on the 30, 60, and 90-cu. ft. boxes, respectively.

Another attention-getter at the Hussmann booth was the L-11 open frozen food case featuring automatic defrosting that will hold 1,500 lbs. of frozen foods, and line up with the company's open meat case.

The L-11 is a single-duty case 11 ft. 3 in. long. Display shelf is 30 in.

More pictures of products shown at the Super Market Institute Show appear on page 18.

wide and can be set to 15 in. below the bottom of the glass in front. Case is automatically defrosted once every 24 hours by electrical resistance heaters which are built in the coil in the base of the case. The L-11 is available without superstructure, with a medium height superstructure, or with a tall, mirrored back.

"Blizzard" case introduced by Weber Showcase & Fixture Co. for

frozen foods and ice cream employs forced air refrigeration from coil in bottom compartment that has an automatic water-jet defrost system.

Specifications for both the frozen food (RSD-2041) and ice cream (RSD-2042) are identical except that in the latter an 8½-in. wide insulated baffle is added to shelf at counter height. Cases are 94 in. long without ends, which are removable.

The one case will hold 972 average packages of frozen foods, the other 1,035 average pints of ice cream. Each has three unrefrigerated shelves: one at counter height; a second, which is adjustable, and a top shelf at eye level.

Weber Uses Water-Jet Defrost

For defrosting, water is turned on automatically by timing mechanism and flows into drip pan above coils to wash off frost. "Non-conducting" plastic connections are used for water inlet and drain pipes, "assuring free flow at sub-zero openings," the company states, while an auxiliary bleed line completely drains water-inlet pipe after defrosting. Defrosting takes nine minutes.

Wire dividers finished in white Dulux which can be set in case will fit anywhere with 1-in. adjustments.

Open frozen food cases were a feature of the C. V. Hill & Co. display, a 56-Z model being shown in line with 66-R and 66-F open meat cases, which it matches. A glass

Commercial Refrigeration



BACK ROOM storage facilities for frozen foods which permit markets to carry a larger stock with fewer deliveries is provided by such equipment as Hussmann's new RL-30 refrigerator which can be used in single, double, or triple units for 30, 60, and 90-cu. ft. capacity. Here Mort Paymar of Klein Super Markets in the Twin Cities works the new unit into store plans with Phil W. Herman of Allied Store Equipment Co.



DISPLAY FREEZER for frozen foods or ice cream as introduced by Bally Case & Cooler interests Sheila Jackson. The 19DF model shown here has a 19-cu. ft. capacity. Same design is also available in 12-cu. ft. model designated as 12DF.

Efficiency Dropped with the Temperature in the 90's



Cold hands put a "frostbite" on production efficiency in the 1890's. Today, efficient unit heaters force billows of warm air to every corner of even the largest plants. The temperature stays up... so does worker efficiency.

Mechanical plant heating is just one of the factors, selected from a multitude of industrial applications for motor power, which has contributed

to the present era of mass production methods.

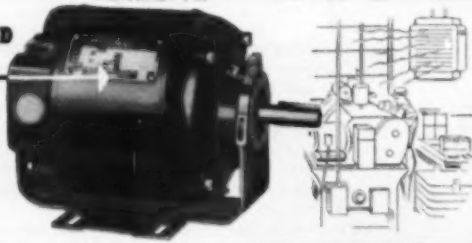
Ever since its founding in 1890, Emerson-Electric has specialized in building dependable motors for equipment used in industry, on the farm, in business, and in the home. There is a complete line of Emerson-Electric motors in ratings from 1/20 to 5 horsepower. Your inquiry is invited. THE EMERSON ELECTRIC MFG. CO., St. Louis 21, Mo.

MODERN INDUSTRY IS POWERED WITH ELECTRIC MOTORS

Write for these Emerson-Electric Motor Data Bulletins

Manufacturers requiring motors 1/20 to 5 h.p. can profitably use these reference guides. Specifications, construction and performance data are included for these motors:

- ☐ M119-A Capacitor-Start
- ☐ M119-B Split-Phase
- ☐ M119-C Integral
- ☐ M119-D Fan-Style
- ☐ M119-E Oil-Burner
- ☐ M119-F Jet Pump
- ☐ M119-G Shower



EMERSON ELECTRIC
MOTORS • FANS APPLIANCES

LEADERS IN THE FAN AND MOTOR INDUSTRY SINCE 1890

divider separates frozen food case from normal temperature fixture, but when two or more low temperature cases are lined up this divider can be omitted.

Hill's "Z" line is available in 8½ and 11-ft. lengths (without ends) and employ forced air circulation through fin coils located at rear wall. Automatic defrosting is achieved through Therm-O-Cycle hot gas system.

Hill Has New "90" Series

Also displayed by Hill was the new "90" series open cases for frozen foods and ice cream which are available in 7 and 10-ft. lengths as remote or self-contained models.

Automatic defrosting is a feature of the open LO-8 frozen food display case shown by the Warren Co. This model is 8 ft. long and is available for remote installation although compressor can be housed in a 3-ft. extension counter.

The case can be had with a mirrored canopy, lighted canopy fitted with photographs of foods, or with merely the 3-in. price tag rail.

Freeze-Rite Division of Bailey & Perkins had on display such items as a new 15-cu. ft. capacity open case (GF-1579) for frozen foods or ice cream and a 56-in. long open dairy cabinet (GD-2956). The low temperature case has five refrigerated divider plates when used for frozen foods but six plates for ice cream. For the latter application, it can be equipped with a single ¾-hp. machine or two ½-hp. hermetics, the dual unit job being recommended to provide a safety factor.

Dairy Case Has

108-Quart Capacity

The company's open dairy case holds 108 quarts of milk on the lower platform and 64 pints on the "mezzanine" shelf, in addition to having a top shelf for non-refrigerated display. This is a self-contained forced-

air case provided with automatic defrosting.

Newest of the Bally Case & Cooler Co.'s items shown was the open style display freezer for frozen foods or ice cream. Also available in the 53-in. length, the 19DF model which measures 88 in. long was on display. Smaller model provides 12 cu. ft. of storage; the larger model, 19 cu. ft. In addition to plate coil dividers, case has an overhead plate coil. Roll-

(Concluded on next page)

Buy Peerless FOR PERFORMANCE



The
**PIE
PLATE
UNIT**

Unmatched for Efficiency

Here is today's outstanding refrigeration value. The Peerless Pie Plate Unit delivers maximum efficiency because it utilizes all of the cooling surface. Its compact design permits it to fit into less space.

The power-packed round coil of improved evaporator design is ideally suited for use in soda fountains, direct draw bars, reach-in refrigerators and similar cooling applications. It has all-aluminum casing and brackets; aluminum fin surface on copper tubing; oilless fan motor. Available in three sizes, with or without drain pan. Write for detailed information.

Peerless of America, Inc.

1501 N. Magnolia Avenue
Chicago 22, Illinois, U.S.A.



MORE THAN 13 sq. ft. of display area and over 15 cu. ft. of refrigerated space are provided in the new "Four by Four" table designed by Sherer-Gillett and scheduled to be available to dealers in July. Refrigeration is supplied by 1/2-hp. condensing unit; turntable in center is optional equipment. Posing with it is Pandora Van Cleet.



AUTOMATIC WATER-JET defrost system on Weber's new "Blizzard" open case for frozen foods or ice cream intrigues Pat DeRose. Timing mechanism turns on water for defrosting; water inlet and drain pipes are of plastic to assure free flow at sub-zero openings, the company states.



AIR CONDITIONING does a great deal to attract new customers and keep present ones coming to supermarkets, according to Typhoon, which arranged this display to show how its 10-ton package model could be "split" for remote location of condensing unit while coil section is mounted above gondola to use the barest minimum of valuable selling space. Other model is Henrietta Joras.

Packaged Air Conditioners Also In Evidence

(Concluded from preceding page) back lid can be pulled over case at night to reduce operating costs. Sealed condensing unit which mounts in base can be removed for service.

Frigidaire placed most emphasis in its booth on the recently introduced open frozen food and ice cream cases that feature forced air cooling with part of the air going through hollow dividers capped with diffusers.

Frigidaire Shows

Air Conditioning, Too

Also attracting attention of supermarket operators were models of Frigidaire packaged air conditioners and a 30-hp. condensing unit.

Only other display at the show featuring air conditioning was that of Typhoon, which had a 10-ton package unit in its booth plus a display showing how such a unit could be "split" for remote location of condensing unit while the coil and air-handling section is installed above display shelves in market.

This arrangement, pointed out Typhoon officials, takes up a minimum of space, requires no ductwork, yet provides zone control when more than one unit is employed.

"Mr. Four by Four" is what Sherer-Gillett calls its new dump table (available in July) that measures 4 ft. square. More than 13 sq. ft. of display are provided in the table, which has more than 15 cu. ft. of refrigerated space. Table is powered by 1/2-hp. air-cooled unit with automatic defrosting.

An optional item to be provided is an electrically driven turntable in the center of the display section for featured items or signs.

Another new item shown by Sherer-Gillett was its 3110C open triple-deck dairy case which has 40 sq. ft. of refrigerated display shelf plus 13 sq. ft. of non-refrigerated shelf (with optional superstructure that includes mirrored canopy). This case is 10 ft. long and stands 59 in. high with superstructure, 45 in. without.

Newest thing in the Tyler line shown for supermarket operators was an open produce case available in 8 ft. (SO-8) or 12 ft. (SO-12) lengths with or without canopy superstructure for top display or double duty.

Display racks in this case can be adjusted to several angles to meet the needs of the grocer.

McCray featured several fixtures that have refinements over its previous models. Included was the GP line of open frozen food cases with automatic defrosting, the GO high angle case for produce, and the "Island

King" dump table.

Instead of showing any equipment, Friedrich Sales Corp. displayed illuminated full-color photos of the various items in its line in numerous installations.

for all water cooling -- use **Filtrine**
—sell more condensing units

"DO" Orders are Vital!

For all Federal Agencies . . . All Armed Services . . .
Filtrine products meet government specifications.

Promote your own condensing unit sales with Filtrine's 20-year-life construction . . . high capacity . . .
Super Storage . . . more than 40 years' dependability.

COOLERS FOR MESS HALLS — CAFETERIAS



Sell your condensing unit with Filtrine Stainless Steel or Duro finished cabinets, equipped to suit with top/side shelves, bubblers, glass-fillers. Can be Taste-Master equipped to remove chlorine, rust, sediment from water.

COOLERS FOR X-RAY & PHOTOGRAPHY

Sell your condensing unit with Filtrine models repeatedly named by V.A., Signal Corps, Air Force, etc. for X-ray and photo-labs. Under counter design and floor-mounted models with stainless steel work-table top. Filters (extra) to prevent scratched and pin-holed negatives.

PACKAGED CIRCULATING CHILLED WATER SYSTEMS

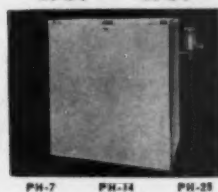
Sell your condensing unit! Systems for drinking or processing water—completely packaged with pump, controls, your condensing unit factory installed. Capacities 5-400 g.p.h.; storage 5-150 gals. Filters and Rectifier-Dechlorinators (extra) to insure taste-free, sparkling water.

REMOTE COOLERS

Sell your condensing unit with remote models for new and replacement jobs—all applications. Capacities 10-1000 g.p.h.; storage 7-300 gals. Filters, Rectifier-Dechlorinators available for all sizes.



MC-16-S MC-25-S
MC-40-S MC-40-S



PH-7 PH-14 PH-25



Typical "Packaged" Circulating Chilled Water System



Remote Model Coolers



Commodore Hotel Installs "The Best"
Individual Room Air Conditioning!



Cleanable Tube Coil
"J" Type Steam Coil, non-freeze

You can enjoy Air Conditioning at its best on your next visit to New York's Commodore Hotel. McQuay Seasonmakers, individual room Air Conditioners, have been installed for your comfort.

Also, McQuay Water Cooling and Steam Heating Coils provide the Air Conditioning in the Century Room, main lobby, ballrooms, and other parts of the Hotel.

Frank A. McBride Co., New York, engineers and contractors, installed McQuay Seasonmakers

on the fifth and sixth floors of the Commodore with not more than 20% of the rooms out of guest service at any one time.

Ripple-Fin construction of McQuay coils, an exclusive feature of McQuay air conditioning equipment, is the product of years of research that has produced the ultimate in heat transfer efficiency. Write for catalog. Representatives in principal cities. McQuay Inc., 1607 Broadway St., N.E., Minneapolis 13, Minn.

McQuay INC.

REFRIGERATION • AIR CONDITIONING • HEATING



Get our new "How to Sell DO Jobs"—write Dept. RF1
Filtrine FILTRINE MANUFACTURING COMPANY • BROOKLYN 5 • N. Y.
"Water Coolers and Filters for 40 Years"



FROZEN FOOD CASES of open design and endless construction in the "Z" series exactly match C. V. Hill's normal temperature single dark cases. A. E. Thornley, sales promotion manager, explains to Mrs. Frank Karlsen of Paul's Super Market, Chicago.

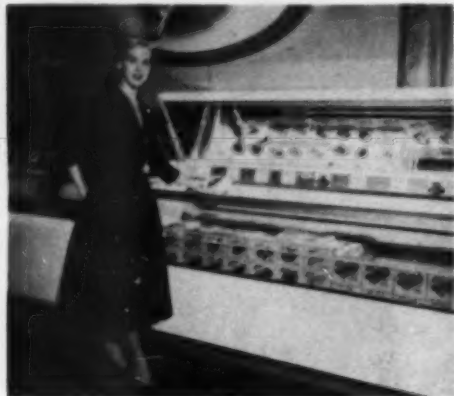


OPEN DAIRY CASE (left) featured by Freeze-Rite Div. of Bailey & Perkins holds 108 quarts of milk on lower platform plus 64 pints on "mezzanine" shelf, besides having a top shelf for items not needing refrigeration. Lorraine Andre discovers.

What Was New

At Super Market Institute Show

(Story and additional pictures are on pages 10 and 11)



"MASTER MERCHANDISER" is what the Warren Co. calls its LO-8 open frozen food case which caught the eye of Shirley Jane Rinz. Shown here with a mirrored canopy, this 8-ft. long case is also available with a lighted canopy or simply a 3-in. high price tag rail.

DISPLAY LIGHT fixture which fits on McCray "Island King" also doubles as price tag holder and helps spotlight merchandiser designed to push "specials" and "leaders" that require refrigeration. Dorothy Ragen is the interested visitor.



MOVABLE PRICE rack for rear loading is one of the features available for Frigidaire's new open frozen food case that has "Flowing Cold" refrigeration. Donna Kime learned at the Super Market Institute show in Cleveland from E. J. Hawkes.



Start out with the right financing plan

to close MORE refrigeration and air conditioning sales



Check before you start. Find out how the **COMMERCIAL CREDIT PLAN** increases your cash by lowering receivables... offers you "brand name" financing, fast credit approval and national service on a local level.



Breeze along with the **COMMERCIAL CREDIT PLAN**. Many of your customers need credit to buy... prefer getting immediate use at reasonable rates... taking 2 to 3 years to pay. Don't miss out on these opportunities.



For complete information, facts and figures, phone the **COMMERCIAL CREDIT** office in your city or write or wire **COMMERCIAL CREDIT**, 14 Light Street, Baltimore 2, Md.

COMMERCIAL CREDIT CORPORATION

A subsidiary of Commercial Credit Company, Baltimore... Capital and Surplus over \$125,000,000... offices in principal cities of the United States and Canada.



DEMONSTRATING how the shelves of Tyler's new open produce case in its Silver Anniversary line can be adjusted to several angles is Les Mickox. The case is available in 8 or 12-ft. lengths, he also tells attractive Jane Casey.

TERRIFIC SALES BOOSTERS!

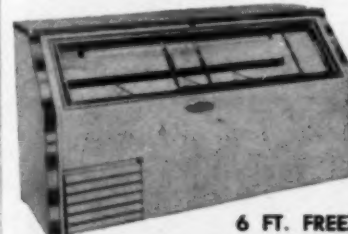


ALL PURPOSE 6 FT. FORMICA TOP DISPLAY CASE

\$339.00 F.O.B., L.I.C.

ALSO AVAILABLE IN 8 FT. LENGTH

- Humidity Control Top and Bottom Coils Interconnected
- Fluorescent Lights
- Hard Rubber Sliding Doors



ALSO MATCHING FREEZER COUNTER DISPLAY CASE

\$389.00 F.O.B., L.I.C.

6 FT. FREEZER 1/2 HP SELF-CONTAINED

ACT NOW—MAIL YOUR ORDER TODAY!



REX-COLD CORPORATION

22-47-9 Jackson Ave., Long Island City 1, N.Y.

Success is the real measure of value. So join the many Distributors and Dealers already successfully using this plan... to show greater sales, greater profits. Make the **COMMERCIAL CREDIT PLAN** your plan.



Maureen McGrath, sales clerk in Chicago's Commonwealth Edison Co. electric shop, accepts the utility's invitation to step inside and see what a window-type room cooler can do. This exhibit is part of a summer-long show the utility is staging this year on its downtown display floor to promote room cooler sales. The display consists of two model rooms, one decorated as a living room and the other decorated as an office. A room cooler maintains pleasant temperatures in each.



Another exhibit in the show demonstrates the work a dehumidifier will do. Each of these shower stalls has the same amount of moisture introduced into it by humidifiers. The one at the left has 68% r.h. and the one at the right, with a dehumidifier installed, holds 8% r.h. Maureen indicates the humidistats that tell the story. In the entire show, the first such that the utility has attempted, 11 different brands of window-type room coolers are exhibited.



Mitchell Appoints Its First Distributor In Havana, Cuba

CHICAGO—Appointment of the first Mitchell air conditioning distributor in Havana, Cuba, was announced recently by the Mitchell Mfg. Co. George Minier will manage the new distributorship, which is located in the Bacardi Bldg.

Herb M. Rose, Mitchell district sales representative in the Florida and Cuba territory, said that with the opening of the Havana distributorship, the company will be in a better position to serve the growing Latin American interest in the new Mitchell line.

Sears Roebuck & Co. will be one of the major retailers of Mitchell air conditioning in Cuba, Rose further added.

Death Takes Burggrabe, Refrigeration Engineer

PASADENA, Calif. — Henry A. Burggrabe, chief engineer in charge of all development work on gas refrigerators for Rheem Mfg. Co. at its Whittier, Calif., laboratory, died recently at his home here after an illness of eight months. He was 47 years old.

Prior to his association with Rheem, Burggrabe worked for F. L. Jacobs Co. of Detroit on the Coca Cola vending machine. Earlier, he was a refrigeration engineer for Servel for 15 years.

He is survived by his wife, four daughters, and a son.

Appliance Store Opens On Dallas' Lovers Lane

DALLAS—Fedders room air conditioners will be featured by the Tri-Cities Appliance Store, which has opened for business at 5212 West Lovers Lane.

The firm is headed by Frank A. Riley, president; Alphonso Ragland, Jr., vice-president; A. P. Catto, vice-president; and W. E. McNally, secretary-treasurer.

McMorrough Appointed Fedders District Mgr.

DALLAS—T. C. McMorrough has been appointed district manager of Fedders-Quigan Corp. and will direct the distribution of the company's products in Texas, New Mexico, and Oklahoma, it was announced recently. His headquarters will be located in Dallas.

11 Room Coolers In 11 Windows of Chicago Utility Launch Show Featuring 50 Models

By George M. Hanning

CHICAGO—In cooperation with 11 manufacturers and local distributors, the Commonwealth Edison Co. here has launched a room cooler show on the main floor of its downtown office that is expected to run through the summer.

The show, first of its kind for the utility, occupies approximately 4,000 sq. ft. of floor space in the utility's Electric Shop. It contains 11 exhibits, each featuring a participating brand of room cooler and a central auditorium area where special entertainment features will be held.

In addition, the utility had devoted all of its windows—11 of them—to the promotion of the room cooler show.

The show was inaugurated on May 5 with a 1,500-line advertisement appearing in all four Chicago metropolitan dailies. An additional series of 600-line ads, each featuring a particular brand of room cooler participating in the show are scheduled for later release by the utility.

Cooperating with Commonwealth Edison in the show are manufacturers and distributors of Carrier, Crosley, Fedders, Frigidaire, General Electric, Mitchell, Philco, RCA, Remington, Vornado, and York room coolers. More than 50 models, ranging in size from 1/2 to 1 hp., are being displayed.

Booths are manned by distributor personnel—if the distributor desires to station a man there. Inquiries brought to utility people, who will not man booths, will be turned over to the appropriate distributor for passing on to his dealers.

Supplementing the product displays are several exhibits and entertainment and variety features aimed at increasing attendance at the show. During the first two weeks of the event, Denny Trettie, an industrial meteorologist, explained where Chicago weather comes from and why it is like it is.

Weather forecasting, recording, and communications equipment will be on display throughout the duration of the show. One teletypewriter will furnish local weather reports every hour on the hour. Another, typing in code, will give weather conditions in other parts of the country.

A radiosonde balloon, 5 ft. in diameter, of the type used for upper atmosphere observations, floats over the other weather equipment.

Above a 60-gal tank of water in which goldfish swim about is a sign explaining that this is the amount of moisture taken out of the air by a 1/2-hp. room cooler in one week.

Nearby a cake of ice sits in a pan below a sign telling the visitor that it would require 1,500 lbs. of ice to reduce the temperature in a room by the same amount as a 1/2-hp. room cooler.

Another exhibit consists of two shower stalls, each of which has the same amount of moisture put into it by means of electric humidifiers. A meter in one of the stalls shows relative humidity of 60 to 70%, while the other shows relative humidity of 30 to 40 points less because an electric dehumidifier is constantly removing the moisture from the air and dropping it into a handy glass jar.

Nearby are set up two model rooms, one decorated as a living room and the other as an office. Each is cooled by a window-type unit and the visitor is invited to go inside and see how comfortable it is.

An oddity is the first "air conditioner" invented by Leonardo da Vinci and installed more than 400 years ago in the boudoir of Beatrice d'Este,

wife of Leonardo's patron, the duke of Milan.

Other entertainment features planned to attract visitors include a puppet show, a magician, and an ice sculpturing pastry chef.

Air Conditioning

Leading Manufacturers Rely on Howell Motors. Whether you make complete central-systems or room air conditioners, you can depend on Howell to supply motors that have the same extra quality you build into your own products. Air conditioning and refrigeration contractors, too, can lower the cost and frequency of service calls by installing precision-built Howell Motors. Call your Howell representative for quick, expert assistance.

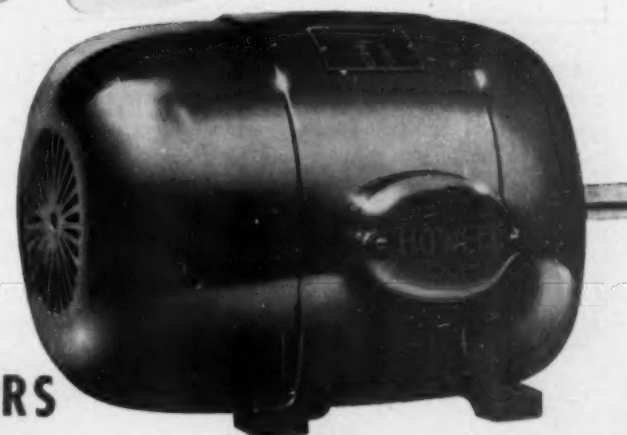


Howell concentrates on industrial-type motors, 1/6 to 250 H.P., standard or special types, for civilian or military needs. Manufacturers in every industry specify them, depend on them.

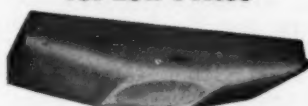


HOWELL MOTORS

Precision-built Industrial Motors Since 1915
HOWELL ELECTRIC MOTORS CO., HOWELL, MICHIGAN



LOOK TO LARKIN for Low Prices



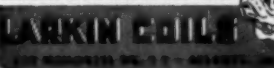
LARKIN CEILING HUMI-TEMP

Price is only one factor in the selection of any product—especially one that has so important a task as protecting valuable perishables. Performance must come first. Quality cannot be overlooked. Durability is highly important. Larkin has all of these. And Larkin has low prices, too. Compare them and see for yourself how low they really are.

For the latest Larkin price list, see your wholesaler. If you wish, write direct to us and we shall be glad to send you one.

Manufacturers of the original Cross-Fin Coil — Humi-Temp Units — Evaporative and Air Cooled Condensers — Air Conditioning Units and Coils — Direct Expansion Water Coolers — Steel Vacuum Plate Coils — Heat Exchangers.

WATCHDOG OF THE NATION'S FOOD SUPPLY



ATTENTION MANUFACTURERS!

SUB-CONTRACTING
SUCTION CAP TUBE
ASSEMBLIES
ANY SHAPE OR SIZE
TO YOUR SPECIFICATIONS

SEALED UNIT PARTS CO., INC.

261 East 161st St.
New York 31, New York

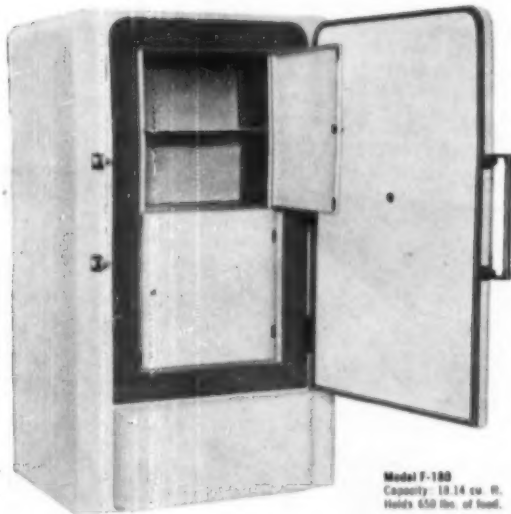
They'll Do It Every Time By Jimmy Hatlo



Do You Have 'Both Feet On The Ground'?

NEW WILSON UPRIGHT FREEZER

...a best seller in three ways!



Model F-188
Capacity: 18.14 cu. ft.
Holds 650 lbs. of food.

PACKED WITH THESE FAST-SELLING FEATURES

- Cold-saving inner doors
- Fast freezing on any shelf
- Built-in sealed unit
- Automatic warning light
- Adjustable temperature control
- Five-year unit warranty

A Wilson franchise gives you the most complete line on the market—farm and home freezers, milk coolers, refrigerators, commercial units, beverage coolers—in many sizes and styles. A few valuable exclusive distributor territories are still open. Write, wire or phone today for full details.

WILSON

REFRIGERATION, INC.
SMYRNA, DELAWARE

HOME FREEZERS • FARM MILK COOLERS • COMMERCIAL REFRIGERATION

1 POPULAR SIZE—18 cu. ft., just right to save the average family hundreds of dollars yearly.

2 POPULAR DESIGN—upright cabinet needs less than 9 square feet of floor space... keeps all food see-able, reach-able... the way housewives like.

3 POPULAR PRICE—Competitively priced to sell—fast!

OTHER WILSON HOME FREEZERS



Self-Contained Upright
FB-30;
capacity 30 cu. ft.



Sectional Upright with
Remote Compressor
FB-301; capacity 30 cu. ft.
60 and 90 cu. ft. models
also available.



Chest Freezer
FC-152; capacity 15 cu. ft.
Others with capacities of
8 and 24 cu. ft.

AN INTERNATIONAL INSTITUTION • SUBSCRIBERS ALL OVER THE WORLD

Trade Mark
registered
U. S. Patent
Office
Est. 1908



AIR CONDITIONING AND
REFRIGERATION *News*

Copyright
1952
Business News
Publishing Co.

F. M. COCKRELL, Founder

Published Every Monday by BUSINESS NEWS PUBLISHING CO.
450 W. Fort St., Detroit 26, Mich. Telephone Woodward 2-0924.
New York office: 521 Fifth Ave., Telephone Murray Hill 7-7158

Subscription Rates: U. S. and Possessions, Canada, and all countries in the Pan-American Postal Union: \$5.00 per year; 2 years \$9.00. All other foreign countries: \$7.00 per year. Single copy price, 30 cents. Ten or more copies, 15 cents each; 50 or more copies, 10 cents each. Please send remittance with order.

GEORGE F. TAUBENECK
Editor and Publisher

PHIL B. REDEKER, Editorial Director

C. DALE MERICLE, Associate Editor

JOHN SWEET, Assistant Editor

HUGH MAHAR, Assistant Editor

GEORGE HANING, Assistant Editor

MARGARET DEAN, Assistant Editor

Editorial Assistants: BERNICE

SHEPLOW, SUZANNE SCHULZ

E. L. HENDERSON, General Manager

ROBERT M. PRICE, Adv. Mgr.

ALLEN SCHILDHAMMER, Western

Adv. Mgr.

ALICE M. BARROW, Adv. Secy.

WALTER J. SCHULER, Production Mgr.

GEORGE CASEY, Circulation Manager

Member, Audit Bureau of Circulations. Member, Associated Business Papers.

VOLUME 66, No. 5, SERIAL NO. 1,211, JUNE 2, 1952

"I have always felt that whatever the Divine Providence permitted to occur I was not too proud to report. The people are not served by pussyfooting, or by that sort of journalism in which nobody will ask who is the editor of a paper or the writer of an article, and nobody will care."—Charles A. Dana.

Underground Movement Threatens Industry

ALTHOUGH few know about it, we understand there is an underground movement within our industry that is growing more powerful every day. And strange as it may seem, some of the finest people are behind it.

Whether it will ever come out in the open is questionable at the moment. It was only at considerable personal peril that we even learned the name of this secret organization. While hiding behind the bar in the clever disguise of a two-headed mop at a recent convention, we heard two patrons furtively discussing in whispers their problem, making frequent references to "SPCES" (pronounced "speace").

This set us to thinking with both heads, two always being better than one, especially for mops. Immediately we jumped to the obvious conclusion (and tripped over the bucket, which nearly gave away our disguise—something we've been trying to do for some time because no one will buy the thing) that the mysterious talk concerned rocket ships and interplanetary travel.

Surely, these two imbibers at the bar were none other than "speace cadets."

Continued eavesdropping, and rather damp work it was, proved confusing, however. This is usually the case. Once had an uncle by marriage who was a professional eavesdropper for years until he dropped a heavy one on his right foot. Was laid up for 11 weeks.

But to get back to the bar—"a dry martini, please"—it developed that our patrons were discussing the hazards of giving technical talks. Turned out that the name of the organization was . . . shhhh . . . the Society for Prevention of Cruelty to Educational Speakers!

It seems that the members of this sub rosa organization thoroughly enjoy giving talks of an educational nature before various groups in the industry. But they are frequently confronted with happenings that would shatter the very soul of less stout-hearted men.

"A little more thoughtful advance preparation by the committee in charge would solve these problems," explain the founders of SPACES.

We know what they mean, and we sympathize deeply. Some years ago we saw one speaker get the works.

His talk was based entirely on slides, and just as he started, the lamp in the projector burned out. No one had thought to provide a spare, so there was a mad scramble by the committee. Another lamp was found, but only after considerable delay.

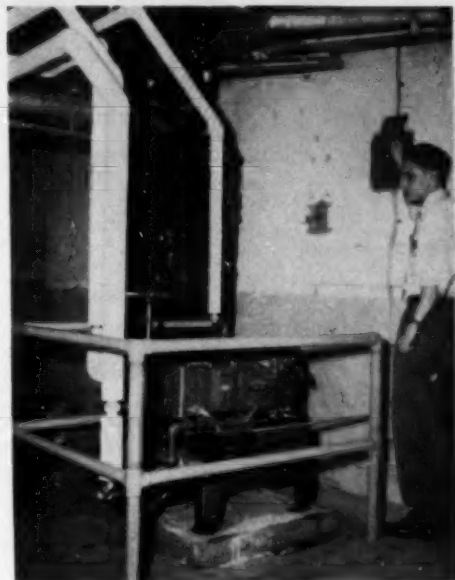
As it happened, it might have been better if the second lamp had burned out, too. The machine had been set up so far from the screen that the light didn't carry, thus making the slides barely discernible. And the fact that instead of a proper screen the committee had strung up an old sheet which waved in the breeze and didn't improve things a bit.

Enlargement of the slides was terrific. Top portions of some diagrams were 8 ft. above the speaker's head, we'll swear. Obviously, he needed a pointer, so the committee once again scurried around and finally came up with a stick all of 18 in. long.

This worked out all right. The slides were always upside down the first time anyway, so he had no trouble reaching the upper part of the diagram. More stiff necks the following day, though.

On the way to work this morning we mailed a small contribution to SPACES.

INDUSTRIAL applications



John Nieme, mechanical engineer for Parke, Davis & Co., pharmaceutical manufacturer, throws the switch on the new instantaneous "lonless" drinking water system powered by an Acme Flow Cold liquid chiller.

'Wonder Drug' Production

It Wouldn't Be Possible on Commercial Scale Without Modern Refrigeration, Says Parke, Davis & Co.

DETROIT—Manufacture of the "wonder drugs"—Cortisone, Eschatin (which contains cortisone) and the miraculous Vitamin B-12 would not be possible on a commercial scale without the use of modern industrial refrigeration, according to Henry Desmond of Parke, Davis & Co. Large quantities of refrigerated alcohol are used in the process of extracting hormones from animal glands.

At the beginning of the process, which might be compared to making coffee, animal glands are "soaked" in alcohol held at a temperature of 35° F. The specially denatured alcohol, known as Type 3-A is stored in two 500-gal. insulated tanks.

These tanks are covered with 2 in. of rock cork. Even in summer weather, when the alcohol in the tanks would rise to 85° F., it is cooled through a 50° F. range to 35° F. and held at this temperature, ready for use.

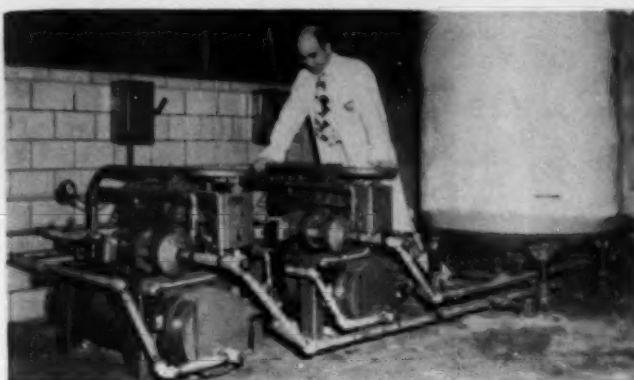
Cooling of the tanks is handled by two Acme "Flow Cold" liquid chillers. Each tank handles 15 gal. of alcohol per minute with 3-hp. refrigeration capacity. These refrigera-

tion units are completely self-contained, and equipped with their own compressor, condenser, receiver, and pump. Installation was made in the Parke, Davis & Co. plant by plant maintenance men, in a matter of hours.

In the second stage of the process in the manufacture of Cortisone and Vitamin B-12 the "saturated liquid" produced by soaking animal glands in cold alcohol is then frozen to a solid state. At this point the drugs are extracted by a process known as "sublimation" in which the solid becomes a gas without ever passing through the liquid state.

This process takes place in a double tank, in which chilled ethylene glycol is constantly circulated through the outer shell. The ethylene glycol is held at a temperature of 10° F., by a single 15-hp. Acme Flow Cold liquid chiller.

At the same time the inner vessel is held at a vacuum of 15 microns—which is almost an absolute vacuum. The double wall, heavily insulated cabinets are known as "freeze-drying" cabinets.



Henry Desmond, chemist, examines the Acme Flow Cold liquid chillers used in the manufacture of the "wonder drugs," Cortisone and Vitamin B-12.

Parke, Davis & Co. also uses the Acme Flow Cold liquid chiller to supply chilled drinking water to a series of bubblers. In this system there is no storage tank, as the insulated pipe loop between the Acme unit and the bubblers is of sufficient capacity to supply all of the "reserve" cold water storage that is necessary.

In this installation a 3-hp. Acme unit supplies water at 45° F. to the loop, and the water is circulated at the rate of 15 g.p.m.

At the time the system was installed all chilled water piping was replaced, and the pipes thoroughly insulated. The old "bubblers" or fountains, however, were retained.

The Parke, Davis & Co. engineering department is headed by Dow Foraker, chief of engineering.

Dawson Directs Sales for Bell & Gossett in So. Calif.

CHICAGO—The Richard S. Dawson Co. of Los Angeles has been appointed sales representative for Bell & Gossett Co.'s industrial products in Southern California, effective June 1.

Industrial products of Bell & Gossett, which also manufactures hot water heating equipment, include heat exchangers, pumps, valves, refrigeration equipment, oil coolers, evaporators, intercoolers and after-coolers, and fractional horsepower motors.

The Dawson company will service the same territory covered by DeWitt Clark, concentrating its efforts on industrial products exclusively.

Worthington Corp. Promotes 3 District Representatives

HARRISON, N. J.—T. J. Kehane, general sales manager, Worthington Corp., has announced the appointment of J. P. McArthur as manager of the company's Philadelphia district sales office, succeeding the late W. J. Daly. McArthur was formerly regional manager of west coast sales.

H. W. King, formerly manager of the San Francisco district office has succeeded McArthur as regional manager, west coast sales.

P. L. McManus, formerly resident salesman in Portland, Ore., has been appointed manager of the San Francisco district office.

McArthur, a graduate of Penn State, joined Worthington in 1936 as an application engineer in the Philadelphia office. Subsequently he became attached to the Marine Div. and was appointed Pacific Coast manager of marine sales until 1944 when he was given the post of San Francisco district office manager. In 1949 he was made regional manager of west coast sales.

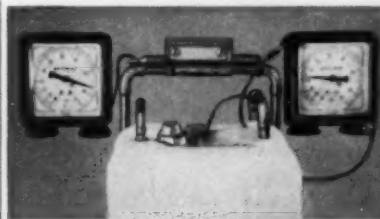
King started his career with Worthington in 1923, after graduating from the University of California. He was successively a general line salesman in Kansas City and Seattle district offices and has been manager of the San Francisco district office since 1949.

McManus holds a B.S. degree, University of Kansas, 1935; and M.S. from the University of Idaho. He joined Worthington in 1936 as a rock drill demonstrator in Seattle. After military service during the past war, he returned to Worthington in 1946.

Liquid-charged expansion valves give you positive bulb control IN ANY POSITION



Here's Proof



Dramatic proof of the efficiency of A-P Liquid-Charge. In the unit pictured above, there is a 54-degree temperature difference between valve and bulb, and the valve is mounted upside down! Despite these conditions, the bulb provides perfect control. Unusual? Yes; but typical of the efficiency and dependability you can expect from A-P Liquid-Charged Valves!

Here's an all-purpose valve serving every requirement . . . low temperature units, commercial applications, air conditioning. Select the capacity you need, install . . . and enjoy day-in, day-out dependable service.

Unusual applications are no problem when you install an A-P Liquid-Charged Expansion Valve. Install it upside down . . . at any angle . . . even lower than the bulb—in fact, in absolutely any required position, and in any ambient temperature. You are sure to get positive, precise control.

Manufactured to the highest standards of quality, every A-P valve has a rugged, leakproof, forged brass body and corrosion-resistant, stainless steel needle and seat. Power element is liquid-charged and all parts are silver soldered for durability. Yes, quality construction throughout to assure years of economical, trouble-free service.

Every A-P valve is designed for original equipment or for replacement service. Get the full story. Write today for Bulletin R-16.

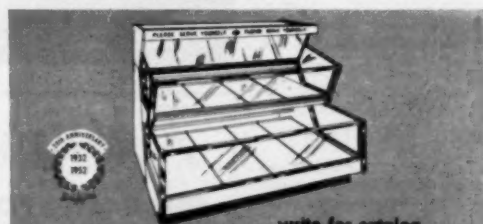
DEPENDABLE
Controls

A-P CONTROLS CORPORATION

(formerly Automatic Products Company)
2460 N. 32nd Street • Milwaukee 45, Wis.
In Canada: A-P Controls Corporation Ltd., Cochrane, Ont.

Buy Bally

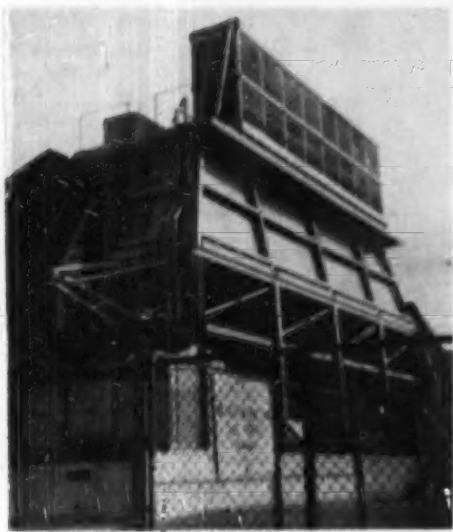
Refrigerated Display Cases
... celebrating 20 years of serving
America's finest food stores



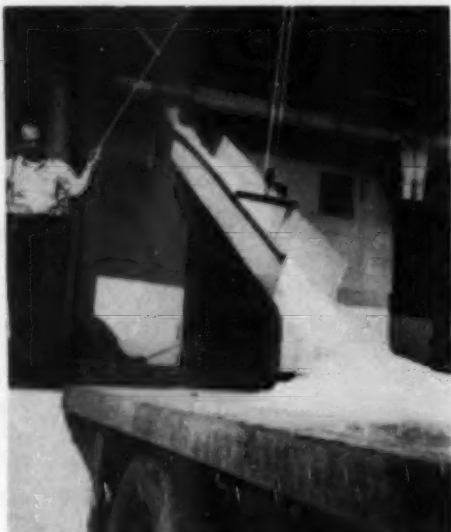
write for catalog

OPEN STYLE Double Deck Case (illustrated)
... ONE OF 62 MODELS AND SIZES

Bally CASE and COOLER CO., Bally, Pa.



FLAKE ICE BINS at City Market Shipping Dock, Los Angeles. Top right is water cooler. At left can be seen part of housing covering ice machines. Lower left is metal housing which protects six York compressors.



FRED FLEMING, part owner of the dock firm, loads ice onto flat bed truck for use in nearby market.



ICE DROPS from overhead conveyor into portable cart. Ice will be shoveled over produce in trucks.

A Million Lbs. of Ice a Month

Los Angeles Produce Shipping Dock Uses 6 Units, Cuts Ice Costs 70%; Shippers Say Flakes Don't Damage Cellophane Bags, Bruise Produce

LOS ANGELES—A million pounds of ice is a lot of ice, but that is the monthly capacity of the new ice making equipment the Fleming Brothers had installed at their City Market Shipping Dock in Los Angeles by Commercial Refrigeration Co.

Efficient loading and icing of hundreds of truck loads of fresh produce monthly means using fast and accurate methods. Icing is not a problem at City Market Dock any more as the completely automatic York system does away with hand chopping, pulling 300-lb. blocks of ice out of a storage room and other obsolete methods of hand labor.

This automatic system consists of six York DER-25 "FlakIce" machines,

six York 10-hp. compressors, cooling tower, water softener and filter, bins, automatic weighing device, and screw type conveyors.

The ice making machines are located on the roof alongside the compressor water cooling tower. The ice from the machines drops into a bin which is cooled to 26-27° F. by a separate York "Freon" system.

A hydraulic ram with arms keeps the ice free from the sides of the bin. A screw type conveyor in the bin delivers the ice to the hopper opening. The automatic weighing mechanism and the hopper opening work together. When 300 lbs. of ice has dropped into the hopper the opening closes.

Another screw type conveyor delivers the ice to the desired location on the dock. The dock stall that ordered the ice opens manually operated doors in the conveyor housing allowing the ice to drop down a portable chute. The ice is either chuted into the blower to be blown into the produce trucks or is dropped into hand trucks to be shoveled onto produce as needed.

The entire operation of this large efficient system is controlled from the dock by pushbutton. Only about two minutes elapses from when a loader signals the operator for ice until the ice is being blown into the truck. This time saving element is a very important factor.



FLAKED ICE is blown into truck to cover produce. These trucks ship fresh foods as far as Texas or Utah.

OUR NEW CUSTOMER KELVINATOR

reports on

FUSITE GLASS-TO-STEEL HERMETIC TERMINALS

This is the
Kelvinator
Compressor



Here's the
Fusite
Terminal

Kelvinator is now in full production using Fusite in their compressors for domestic and light commercial (up to 1/2 H.P.) units.

They report not a single "leaker" out of the first 15,000 run.

Take a bow Kelvinator engineers.

Wait 'til we look behind us and we'll take one ourselves.



THE FUSITE CORPORATION

4026 FERNVIEW AVE., CINCINNATI 13, OHIO

Maintenance of this huge system is handled by Commercial Refrigeration Co., Los Angeles York distributor, under a York Certified Maintenance Plan; this plan relieves the Flemings of any worrying about the proper care and operating efficiency of the system.

Ice produced by this method costs about 70% less than an equivalent amount of purchased commercial ice, it is stated.

The produce shippers like the flake ice made by the system because it packs better, lasts longer and is "soft" enough not to damage the cellophane bags in which so much produce is now packed. The water softener and filter system also comes in for its share of approbation, as when the ice melts it does not leave the usual unsightly residue on the produce.

Walter Fleming, president of City Market Co. said, "We like our new ice system because it does make money for us and what is almost as important, it makes our dock, one of the oldest in the business, a complete unit."

"Being complete and efficient we are able to give top flight service to shippers. This is necessary now, as shipping produce long distances from here is a new phase of our business as until comparatively recent times this area consumed all the produce it raised. But now with a surplus being raised produce is trucked out of here to nearly all points in the United States."

Aminco Products Moves Into Larger Quarters

DETROIT—Aminco Refrigeration Products Co. is now occupying new quarters at 1000 E. McNichols Ave. here, announces Ed Kellie, president. Also at the new location is the company's Industrial Cold Div. which manufactures low temperature test cabinets for industrial and laboratory use.

The new quarters provide more than double the floor area of the previous location, Kellie says.

evaporator
problem?

solve
it with
RUDY
mild steel
EVAPORATORS

Across-the-top or U types...
mild steel...galvanized...
super finished...standard
models...prompt service...
low cost.

WRITE FOR DETAILS

RUDY Manufacturing Co.

Specialists in
Manufacturing Evaporators and Condensers
DOWAGIAC, MICHIGAN

Redmond

MICROMOTORS
Prompt shipment!

"ONE OR ONE THOUSAND"
74 different models in stock
FACTORY DISTRIBUTORS
CYCLO-FREEZE CORP.
MARVIN L. "FERDIE" FERENTAD
2120 S. Lyndale, Dept. A, Mpls. 5, Minn.

'Information Please'

Oil Logged Coils, Controls on Machine Located Outside, and Starting Capacitor-Type Hermetics Prompt Questions at Philadelphia Meeting

Editor's Note: "Information Please" sessions are always of interest and these proved no exception when the Ninth All-Industry Educational Conference and Exhibit was held in Philadelphia.

The following are typical of the problems discussed.

Should Coils Be Cleaned

When Installing Separator?

Q. Should the coils of a system which is believed to be oil-logged be cleaned out before installing an oil separator?

A. No, that isn't necessary as a rule. We've been making a study of "oil-logging" and have learned that sometimes the design of the compressor doesn't let oil get back into the crankcase even though it's returned from the coil.

Oil Return Difficulties

With 'Freon-22'

Q. What oil return difficulties can be encountered with "Freon-22" systems as compared with "Freon-12"?

A. At a point of about 9° F. oil and "Freon-22" begin to separate. Above that temperature they mix; as we approach 0° F., they separate completely. This doesn't mean, however, that oil won't be returned from the coil. If everything is properly designed and installed, oil will be returned to the machine by the mechanical action of the refrigerant flowing through the system.

How To Handle Controls

On Outside Machine

Q. We have a machine located outside. In the winter the low pressure control won't turn the machine on. We have been using an air switch in the walk-in cooler to operate the unit during winter. What is the best answer to this problem?

A. When the outside temperature falls below that of the box temperature, the refrigerant will go to the

machine and condense in the crankcase. This problem has been quite common in the South and Southwest where machines are often located out-of-doors. Probably the best way to control it would be to put the machine on temperature control all the time, leaving the pressure control in the system to operate as a safety device.

To assure the machine's operating on a defrosting cycle, you can put on a dual temperature control with one bulb on the coil and the other to feel box temperature.

When the machine finally starts, however, there is apt to be slugging due to the forced operation, so generally it would be better to move the troublesome machine into a warmer location.

If you have an oil separator on a machine operating in the cold ambient, quite a bit of refrigerant will go into the oil separator when the machine starts up and condense in the separator. When the float valve in the oil separator opens, some of this refrigerant will be returned to the compressor, but that remaining will evaporate and cool the shell of the oil separator. The cold shell will condense refrigerant as it comes in, so you get the effect of a pup chasing its tail.

To avoid this short-circuiting, insulation should be added to the oil separator. Wrap about 2 in. of rock wool, for example, around the outside of the shell and then paint it to keep it dry.

It was pointed out also that this problem of controlling the operation of a machine in a cold location is one that is common with milk coolers used on farms because they're usually located in a milk house that is not heated.

One serviceman reported that he had built a louvered box around a condensing unit in a location that was cold and hung a 150-watt lamp inside. This arrangement "works fairly well though it's not perfect," he said.

Installation of an immersion heater

in the crankcase was suggested by another, and while it was agreed that this would work, a thermostat to control the heating element was considered advisable.

Still another reported success with wrapping soil cable around the compressor, etc., interlocking the heating cable with the control so the heat was turned off when the machine was running.

Another possibility offered was to install a solenoid valve in the suction line with the low pressure control upstream from the solenoid. With the solenoid closed on the off cycle, refrigerant couldn't get over to the machine and condense in the crankcase.

What Is Best Relay for

Capacitor-Type Hermetic?

Q. Which is best for starting a capacitor type hermetic unit — an amperage relay or a voltage relay?

A. Generally speaking, the voltage relay is probably better, but both types have their place. Because of its lower cost, the amperage relay is used on smaller units, but the voltage type relay will work better under a variety of conditions, such as low voltage.

If a manufacturer specifies an amperage relay, however, then use that type; if he specifies a voltage relay, use that.

SLANTS on Service

"Slants on Service" is a handy "package" devised by the NEWS to meet the needs of its busy readers in the service and contracting business.

Chemist Questions Use Of Torch on Liquid Line

Ansul Chemical Co.
Marinette, Wis.

Editor:

I have been reading your swell little column of "Slants on Service" in the May 12 issue of AIR CONDITIONING & REFRIGERATION NEWS and am wondering if you would mind my raising some questions concerning the article entitled "Torch Burns up Carbon Clogging Liquid Line."

In reading this little article the thought occurred to me that perhaps heating a liquid line filled with liquid is perhaps not the safest procedure. It is true that there would be pressure released through the flow control and back into the receiver and condenser. However, do you think that at all times the pressure relief would be rapid enough to take care of the fast build up in pressure occurring in the line due to heating. The confined liquid in a copper line can build up very great pressure rapidly on heating and if the pressure was not relieved rapidly enough the bursting of the copper line is a possibility.

I am also wondering about the decomposition of the refrigerant due

to heat causing the release of acidic materials which carried along with the refrigerant could corrode the expansion valve and other metal parts in the unit.

Do you think there is a possibility existing that if the copper line is heated hot enough to burn up carbon, conceivably a scale could be formed on the inside of the copper tube which would cause blockage in perhaps the flow controls? Although this may perhaps be a little remote perhaps we should think about it.

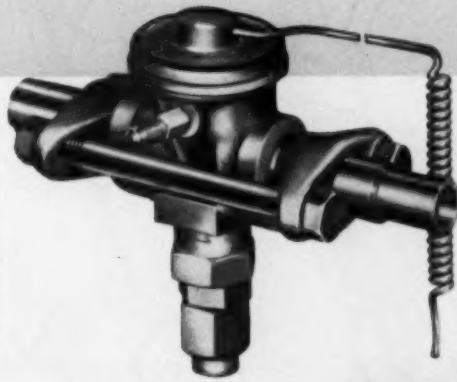
Perhaps you would be interested in our experiences with sludges over the last 15 or 20 years and we can honestly say that we have had only one case in which we could definitely state that the bulk of the sludge was composed of carbon. We have never had at any time a case in which the liquid line was plugged. Plugging of flow controls, driers, filters, and screens in expansion valves is a common occurrence; however, to my knowledge we have no record of this occurring in a liquid line.

Do you think the carbon referred to is possibly a sludge which would be loosened by heat and moved along by the liquid refrigerant? Isn't it more than likely, however, if there is sufficient sludge (carbon) in a unit to cause a blockage in the liquid line that the amount of corrosion and/or oil breakdown is of such magnitude that an overhaul job is probably in order.

Carbon can only be burned at a red heat and there is considerable doubt in my mind as to whether simply heating a liquid line would have any effect at all other than loosening sludge.

JOHN D. BOFF,
Chief Chemist,
Refrigeration Research

Now... You can be sure of... Positive Control on Locker Plant Installations with DETROIT Low Temperature, Liquid Charged Expansion Valves



DETROIT 786 AND 787 EXPANSION VALVES

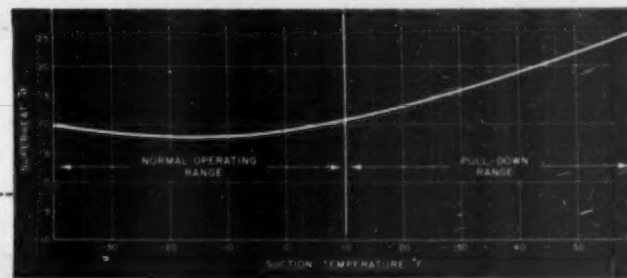
- ★ May be installed in any position
- ★ May be installed inside locker or cabinet in coldest location
- ★ Will give positive control under all conditions

Freon-12 capacities with liquid "Z" charge at -20° F. suction temperature and 100° F. condenser temperature...

No. 786	3.1 tons
No. 787	5.6 tons
No. 777	.25 and .5 tons
No. 777-E	.5 and 1.0 tons

DETROIT's outstanding liquid "Z" charged valves are built specifically for low temperature application with a special body designed to stay at saturation temperature and stabilize the charge. These superior valves give motor overload protection during pull-down and will feed accurately under all conditions.

The outstanding DETROIT liquid "Z" charge feature is available in the Nos. 786 and 787 large capacity valves, and in the No. 777 valves for smaller capacities. Try them—we're sure you'll agree that they're true standouts from every standpoint!



Typical superheat curve of DETROIT "Z" Charged Low Temperature Expansion Valves. High superheat during pull-down starves evaporator to give motor overload protection.

DETROIT

LUBRICATOR COMPANY

3900 TRUMBULL AVE., DETROIT 8, MICHIGAN
REPRESENTATIVES IN PRINCIPAL CITIES
Branches at American Railroad & Railroad Supply, RAILWAY & ENGINEERING SPECIALTIES, LTD., Canadian Representatives in Montreal, Toronto, Winnipeg, EXPORT DEPT., Box 210 Ridgely, New Jersey



DETROIT HEATING AND REFRIGERATION CONTROLS • ENGINE SAFETY CONTROLS • FLOAT VALVES AND OIL BURNER EQUIPMENT • DETROIT EXPANSION VALVES AND REFRIGERATION ACCESSORIES • STATIONARY AND LOCOMOTIVE LUBRICATORS



3 WAYS BETTER!



✓ HIGH STABILITY

✓ LOW WAX

✓ LOW MOISTURE



THE FINEST REFRIGERATION OIL

...at any price!

THE NEW... IMPROVED... ANSUL REFRIGERATION OIL... IS A RESULT OF THE PERSISTENT SEARCH BY ANSUL CHEMISTS AND REFRIGERATION TECHNICIANS FOR THE FINEST QUALITY REFRIGERATION OIL... AT ANY PRICE!

Since Ansul Refrigeration Oil was introduced in 1949... its acceptance by refrigeration men has continued to expand. In only two short years Ansul is one of the leading refrigeration oils sold exclusively through Refrigeration Wholesalers.

The New... Improved Ansul Refrigeration Oil is now available at leading refrigeration wholesalers everywhere. It meets, or surpasses, every specification established by Ansul Research for a high quality refrigeration oil.

BUY IT NOW AT THE NEW LOW PRICE. Use it for more dependable, trouble-free lubrication.

NOTE THESE IMPORTANT ANSUL FEATURES —

- a. Lower flou point.
- b. 30% lower wax content.
- c. Moisture — ANSUL CONTROLLED minimum.
- d. Lower pour point.
- e. Rigidly checked for high stability.
- f. Lowest affinity for moisture.
- g. New low price.
- h. Available in quart, 1-gallon and 2-gallon cans; also in 5-gallon and 55-gallon steel containers.

*Improved features

ANSUL

CHEMICAL COMPANY
REFRIGERATION DIVISION
MARINETTE, WISCONSIN

Ansul has greatly increased its Research facilities — expanded its Research Program — and added new modern Pilot Plant facilities to better serve the Refrigeration Industry.

ANSUL SULFUR DIOXIDE • ANSUL METHYL CHLORIDE • ANSUL OIL • KINETIC "FREON" REFRIGERANTS
ALSO MANUFACTURERS OF INDUSTRIAL CHEMICALS • DRY CHEMICAL FIRE EXTINGUISHERS

Serving Home and Industry
AMERICAN STANDARD • AMERICAN BLOWER • ACME CABINETS • CHURCH SEATS • DETROIT LUBRICATOR • FLEETWAY ROUTES • FOLIO HEATER • HONOLULU PUMP

6 New Representatives Appointed by Sub-Zero

CINCINNATI—Appointment of six new representatives is announced by Sub-Zero Products here, manufacturer of low temperature industrial chilling machines. Marshall & Husch Machinery Co. of Indianapolis will represent Sub-Zero in western Kentucky and all but six northwestern counties of Indiana. The Chicago area will be served by Bernard E. Aldridge, IndustriTool Associates, Chicago.

The St. Louis area will be served by Thermorite Corp., St. Louis. New England States, including Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, and Maine, will have E. Heres DeWyk & Co., Ansonia, Conn., as Sub-Zero representative.

Two foreign representatives for Sub-Zero have been appointed. Service Tools of Canada, Ltd., 60 Front St., Toronto, Ont., will handle all Canadian orders. Japanese customers will be served by Marubeni Co., Ltd., Tokyo.

The appointments are in line with a planned expansion of Sub-Zero Products sales and service. Sub-Zero units are designed to reach temperatures as low as -150° F.

MISSING SOMETHING?

More and better useful information is yours for the asking. See "What's New" page.

Use Key No. for fastest service.

Neuman Replaces Hess As Schaefer Dist. Rep.



MINNEAPOLIS—Dick Neuman has joined Schaefer, Inc. as district factory representative. It was announced by Elton F. Hess, sales manager of the ice cream and frozen food cabinet division of the company.

Neuman will take over the Minnesota, Wisconsin, Iowa, North Dakota, South Dakota, Nebraska, Montana, and Wyoming territory formerly in charge of Hess, recently elevated to sales manager of the Schaefer Commercial Div.

Neuman has been active in the refrigeration and dairy industry since 1928. He is a member of the American Society of Refrigerating Engineers.

Jones Represents Savage In New England, N. Y. Area

UTICA, N. Y.—The appointment of Don F. Jones as sales representative for Savage ice cream cabinets has been announced by Weston Vogel, sales manager of the Refrigeration Div. of Savage Arms Corp. Jones will contact ice cream manufacturers in the upper New York state and New England territory, where he has been associated with the dairy industry.



Current LITERATURE available

To obtain further information on the literature listed below, please refer to key number preceding listing. Please use the "Information Center" form on "What's New" page.

Watco Bulletin Describes New Streamjet Nozzle

—KEY NO. N-610—

NEW YORK CITY—Water Cooling Corp. here has recently published a "Bulletin No. 20A" describing its "Streamjet" nozzles for roof cooling systems where water is scarce.

This nozzle gives a coverage of approximately 1,200 sq. ft. of roof per g.p.m. at 30 lbs. pressure, the company noted. Complete details are given in the bulletin.

Acme Bulletin Describes Flow-Temp Heat Pump Unit

—KEY NO. N-611—

JACKSON, Mich.—A new bulletin on the Acme "Flow-Temp" heat pump has just been printed by Acme Industries, Inc. and is now available for distribution. It describes the heat pump, its advantages for both heating and air conditioning. It uses water as a heat source.

A schematic diagram showing how the Acme change-over valve switches circuits, changing from heating to cooling is also shown. A brief description of the interrelationship of the various components of the unit is also furnished.

This literature is available at all Acme representatives and dealers or may be obtained from the factory.

Book on Dairy Show Sent To Everyone In Industry

—KEY NO. N-612—

WASHINGTON, D.C.—A 16-page booklet about the 18th Dairy Industries Exposition, which will be held Sept. 22-27 in Chicago, will soon be in the hands of every person connected with the dairy industries, according to the Dairy Industries Supply Association here.

The booklet, illustrated with pictures and drawings of Chicago and earlier expositions, will answer in detail questions which prospective show visitors may have about the world's largest dairy industries show, or the continent's second largest city.

The booklet will also report on conventions or special sessions, to be held within the same week by a large number of national and international dairy groups.

The booklet is available at no cost to anyone in the dairy industries who requests a copy from DISA, 1108 16th St., N. W., Washington 6, D. C.

Spec Sheet Published On Brown Thermometers

—KEY NO. N-613—

PHILADELPHIA—A four-page specification sheet describing Brown indicating and recording thermometers has been issued by the Brown Instruments Div., Minneapolis-Honeywell Regulator Co. here.

Called Specification Sheet 600, the folder gives construction and engineering details.

'How To Subtract 85% from Present Costs for Ice'

—KEY NO. N-614—

FARIBAULT, Minn.—"How to Subtract up to 85% from Your Present Costs for Ice" is the title of a new folder issued recently by the American Automatic Ice Machine Co. here.

The folder describes the features and advantages of its automatic ice maker, which, the company says, will make a fresh batch of ice crystals every 30 minutes. Easy access to bin and only 7½ sq. ft. of floor space required are outstanding features.

6 Types of Convectors for Concealed Heating Listed

—KEY NO. N-615—

JOHNSTOWN, Pa.—A 28-page catalog illustrating and describing six types of convectors for concealed heating by both convected and radiant heat has been issued by the National Radiator Co. here.

The catalog explains the different types of heat, gives piping connections, roughing-in dimensions, and convector ratings for either steam or hot water, and describes various types of heavy gauge steel enclosures.

Buffalo Forge Bulletin Describes A. C. Cabinets

—KEY NO. N-616—

BUFFALO—A Buffalo Forge Co. engineering bulletin just published describes the new Buffalo model "G" air conditioning cabinets.

These central units are now available in both horizontal and vertical models in sizes from 875 to 22,000 cu. ft. of conditioned air per minute.

Combinations may be had for any function or functions of air conditioning, including simple cooling, summer cooling and dehumidifying, winter heating and humidifying, and continuous air cleaning. All units may be equipped with an air washer section, as well as automatic controls, if desired.

A number of design changes have brought about greater efficiency, more flexibility, simplified installation, and easier maintenance. All parts are standardized for quick replacement.

Construction is sectionalized to permit a wide variety of combinations and easy assembly on the job.

Wheel shafts are hollow and oversized to develop high static pressures without vibration or approaching critical speeds. Over-all appearance is greatly improved, and the new vertical type "VPC" cabinets are made even more compact than before by the use of flat type Hi-Velocity filters.

Besides the above, the new bulletin includes capacity tables, diagrams, charts, and detail photos to aid in the selection of the proper unit for given conditions. Interested engineers may obtain copies by requesting Bulletin 3703A.

Folder Provides Data on Dry Ice Mass Display Table

—KEY NO. N-617—

NEW YORK CITY—A two-page folder describing its dry ice mass display table for open display of frozen foods and juices has been released recently by William Melish Harris & Associates here.

The piece contains a complete description of the table and its features, data on field tests on frozen juice sales using the table, a picture of an actual installation, and instructions for setting it up.

ReSeal Cushion REPLACEMENT GASKET

Restores Original Appearance and Efficiency Without Replacing the Entire Gasket. Easily Installed.



It's The Lip That Does It!
No. 710 Blk. No. 711 Grey
Tapered design of undercut lip applies permanent pressure against the web of old gasket forming a tight, dirt-free seal.

Available Through Your Wholesaler

JARROW PRODUCTS
470 N. LA SALLE ST. CHICAGO 10, ILLINOIS

AIRO stands for

Complete stock of Refrigeration-Air Conditioning parts and supplies.
Speedy, dependable service when you need it... wherever in the world you want it.
New! Sectional Catalog saves you time. Write for your FREE copy, today!

AIRO SUPPLY CO.
1737 N. Ashland Ave., Chicago 14, Ill.



RUDY CONDENSERS

Any type... brazed... crimped... clean... tight... highest quality... prompt service... low cost.

WRITE FOR DETAILS
RUDY Manufacturing Co.
Specialists in
Manufacturing Evaporators and Condensers
DOWAGIAC, MICHIGAN

For Greater Profits . . . Get these REMCO Loss Eliminators



NEW Cross-Flo POSITIVELY THE MOST EFFICIENT DRIER-FILTER MADE!

New Cross-Flo is now greatly improved—with new REMCAL super-strength drying element, and new FIBERGLAS Depth Filter. New Cross-Flo guarantees increased flow area, increased moisture absorbing capacity, increased filtering capacity, all-around improved efficiency that positively does away with pressure drop premature clogging and plugging. See it now at your wholesalers.

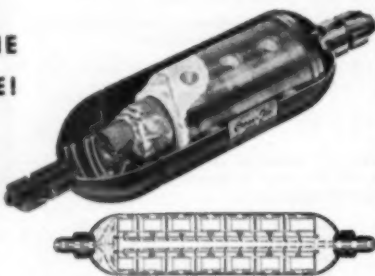
E-Z-SEE FROST-TITE

100% foolproof Liquid Indicators. Guaranteed to eliminate losses from leaking. With new "FLO INDICATOR" flap to indicate all variations of flow.

Frost-relieved Flare Nuts, guaranteed not to creep, loosen or crack. A must for lowside applications. Should be used everywhere in the system.

STANDARD-DUTY DRYERS

The lowest-cost, most efficient molded driers on the market. Ideal for use by original equipment manufacturers and for field installation or service replacement. Available with either Molded REMCAL or granular Silica Gel. Capacities ¼ to 1½ HP.



Carried in Stock by Leading Wholesalers

SEND FOR DESCRIPTIVE LITERATURE

REMCO
INCORPORATED
ZELLENOPLE, PENNSYLVANIA

HOUSEHOLD REFRIGERATION

Analysis for Rebuilding Sub-Par Sales Area Shows Shift In Types of Firms That Are Doing Appliance Sales Volume

ANN ARBOR, Mich.—Two major appliance sales and marketing authorities told a University of Michigan conference that there is no easy way to step up product sales in a below-normal sales area.

Dan Packard, national household sales manager, and R. A. Demmer, marketing and organization manager, both of Kelvinator, advised the university's annual marketing research conference that the rebuilding of an important sub-par sales area requires a thorough field study to get at the facts, sound analysis and interpretation, and decisive action based on logical conclusions.

METHOD IS EXPENSIVE BUT SOUND IF DONE WELL

"This method is admittedly expensive, difficult, and time consuming," Demmer said, "but there is no easy way to solve an involved problem. It should be undertaken only if you are ready and able to act upon the results. If undertaken and properly done, however, it is a sound method that works."

The appliance industry as a business has always had the problem of sub-performance areas and situations to handle because of its constantly changing distribution patterns, Packard said, adding:

"Manufacturers who have gone along with changes in importance of various types of retailing have retained a solid position within the industry. Those who have not been sufficiently conscious of this shifting pattern have lost position, as the market has changed."

He pointed out that in 1930, 50% of all refrigerators once were sold by distributor owned retail stores, while electrical stores accounted for 30% and utility companies 20%. After the depression of the 1930's, he said, distributor owned stores became a minor factor, while department stores with 20% of the busi-

ness and mail order chains with 15%, challenged appliance specialty stores, with 36% of the volume.

Mail order houses and furniture stores had climbed further by the start of World War II, while department stores had declined, Packard said.

"Today," he said, "due largely to the high percentage of sales involving trade-ins, the department store share of sales is still receding; furniture stores are holding position at 18 to 20%; utilities, turning their attention to their natural pioneering assistance on newer appliances, are probably down to less than 5%; mail order houses, also because of the trade-in situation, are probably selling a lower percentage.

Appliance dealers are gaining position, doing approximately 45% of the total; and automotive accessory chains, an entirely new type of outlet for the business, are taking 6 to 8% of the volume."

When field sales problems appear that are sufficiently important and complex, Packard said, they are referred to Kelvinator's special marketing and organization group for analysis.

HOW ANALYTICAL PROCESS WORKS IN PRACTICE

Demmer, who heads this group, described in detail a typical analytical process covering a hypothetical trading area.

"Our field organization must understand the total sales problem involved in a sub-performance area, so that they can plan the solution to the problem, and put the plan into action to produce the desired result," Demmer said.

"Working from this standpoint, we in marketing can often uncover facts—from a detached study of a market—that are not easily apparent to local sales folks—even though they may have worked in the market many years."

Demmer said the Kelvinator approach involved a trading area organization analysis on the basis of available statistics which showed what the industry sold, what Kelvinator sold, how many outlets were available, and Kelvinator's percentage of industry sales and outlets.

Next steps were a geographical breakdown of trading areas and a definition of shopping centers, followed by a field survey of every dealer in the trading area, to be conducted on a personal contact basis, using a special, detailed form. Aftermath of the survey is a dealer summary which lists each outlet and its sales by brand, showing Kelvinator's percentage of total sales in each case.

THIS DATA CAN BE USED FOR REHABILITATION

"When this data is compiled, you will have made a complete analysis of business in the trading area. You will then know who is getting the business, and how it is flowing to the market. With this information you will be able to intelligently plan such moves as are necessary to rehabilitate the retail structure in this area under study.

"As we see it, building an outstanding dealer organization is a matter of vital concern," Demmer said. "It is equally as important a function as building an outstanding product, or having an outstanding advertising and promotional program.

"Admittedly you need all three, but over the years the dealer organization costs more to put together, is infinitely harder to build, and infinitely harder to replace."

Nashville Electric Show Draws 118,000 Visitors

NASHVILLE, Tenn. — Approximately 118,000 persons attended the Electric Show and "Open House" staged by the Nashville Electric Service here at its new Electric Center during the week of May 12, William D. Hall, promotion manager of the utility, reported recently.

He said that reports indicated that more actual sales were closed at the show and more prospects obtained than at any previous show.

This year's show, an annual event, was combined with the dedication ceremonies for the utility's new Electric Center at Church St. and 13th Ave. Fifty-two booths were occupied by 47 dealer and distributor exhibitors.

Crosley Names J. Butler Direct Dealer Mgr. In East

CINCINNATI — The appointment of James P. Butler as direct dealer manager for appliances in the eastern part of the United States for the Crosley Div. of Avco Mfg. Corp. was announced recently by F. F. Duggan, Crosley general sales manager for appliances.

Butler was formerly appliance buyer for Gimbel Brothers, New York City, and prior to that, was housewares buyer for Frederick Loeser & Co. in Brooklyn.

Butler will headquarter in the new Crosley regional office at 50 East 42nd St., New York City.

Government Moves To Ease Copper Shortage

WASHINGTON, D. C.—Two moves by the Federal government last week should head off the possibilities of a drastic copper shortage soon.

President Truman authorized the withdrawal of up to 22,000 tons of copper from the national defense stockpile to compensate for loss of shipments from Chile.

In an effort to get Chilean copper moving into the U. S. again, Acting Mobilization Director Steelman announced that brass mills, wire mills, and other users of high-cost copper from Chile and other foreign sources will be allowed to boost their ceiling prices to reflect part of the higher cost of foreign metal.

Stelman's formula allows American users of expensive foreign metal to raise their ceiling prices to recapture 80% of that part of the extra cost of foreign copper.

Browne, Pearson New Sales Mgrs. at Gibson

GREENVILLE, Mich.—Taking another step in Gibson's long-range marketing program F. L. Sacha, manager of Gibson sales, announced the appointment of W. J. Browne as manager of range sales and C. F. Pearson as manager of freezer sales.

This move was made, Sacha said, to concentrate on a product program for each of Gibson's four products—refrigerators, ranges, home freezers, and room air conditioners.

SPECIALISTS in STAINLESS STEEL!

ROLL-FORMED AND STAMPED PRODUCTS

FUNCTIONAL and DECORATIVE MOULDINGS STAMPINGS ASSEMBLIES

COMPLETE FACILITIES FOR BUFFING ELECTROLYTIC POLISHING WELDING FORMING

MORE THAN 30 YEARS' EXPERIENCE

SKILLED ENGINEERING SERVICE

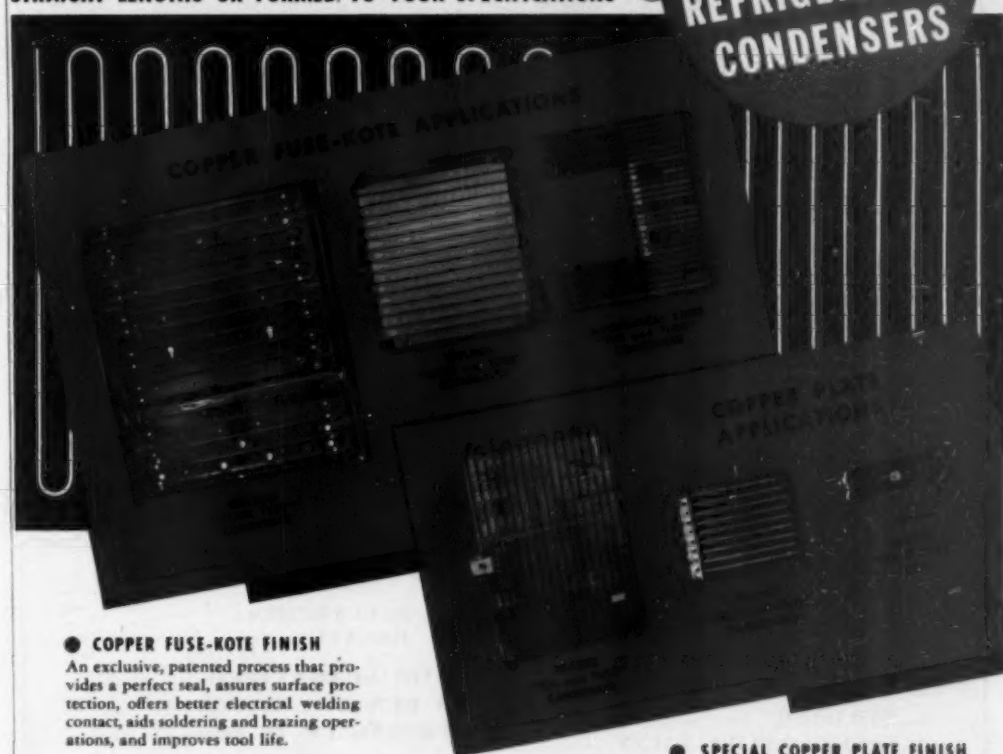
JOHN LEES

Write for catalog and recommendations. Products manufactured to your specifications.

JOHN LEES Division of The SERRICK Corp.
Kilgore Avenue Muncie, Indiana

GM Tubing

STRAIGHT LENGTHS OR FORMED TO YOUR SPECIFICATIONS



● COPPER FUSE-KOTE FINISH

An exclusive, patented process that provides a perfect seal, assures surface protection, offers better electrical welding contact, aids soldering and brazing operations, and improves tool life.

NO MATTER what the design of your condenser units—"fin and tube," "wire and tube," "multiple-pass," or "plate type"—GM small diameter Welded Steel Tubing can help you build them faster, better, and at lower cost!

GM Steel Tubing is clean, ductile, uniform, and unaffected by brazing and silver soldering temperatures. It can be bent to an extremely small radius, and lends itself readily to all types of fabricating operations—expanding, swaging, perforating, flattening, flanging, beading, crimping and drawing.

Why not join the ever growing number of refrigeration equipment manufacturers for whom Rochester Products is already producing GM Steel Tubing at the rate of hundreds of thousands of feet daily!

● SPECIAL COPPER PLATE FINISH that provides, at extremely low cost, sufficient pure electrolytic copper for the most difficult brazing requirements.

● PLAIN FINISH where no coating is needed.

SEND FOR FREE BROCHURE!

"Look Ahead with GM Tubing." That's the title of our illustrated brochure that tells why GM Steel Tubing is first in the field for lasting quality, adaptability and low cost. Send today for your free copy.



Rochester Products DIVISION OF GENERAL MOTORS
Rochester, N. Y., U. S. A.

What's New (Cont.)

60-In. Wide Unit Combines Range, Refrigerator



KEY NO. B-616

MANSFIELD, Ohio—A complete Westinghouse electric kitchen designed for installation in only 60 in. of wall space was announced recently by W. R. Arbuckle, manager of apartment house and builder sales department, Westinghouse Electric Appliance Div.

Equipment for the kitchen unit includes: a 4-cu. ft. under-counter refrigerator, a four surface unit electric range, stainless steel work surface and sink unit, one 15-in. sink cabinet and two 30-in. wall cabinets. The complete unit carries a suggested list price of \$600.42.

Cooking capacity, provided by the Westinghouse Coronet electric range, model FC-64, includes four full-size Corox surface units, all with controlled heats, and a large True-Temp oven with balanced heat for baking. The range is also equipped with a single dial oven control and an appliance outlet.

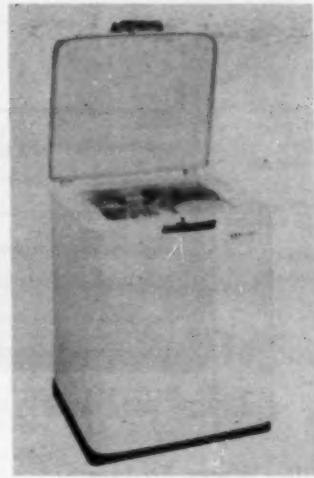
There is freezer storage capacity for 16 lbs. of frozen foods and ice in the under-counter refrigerator, model HD-4. Ice making equipment includes two 14-cube Selecto-cube trays of anodized aluminum.

There is storage space for 8 quarts of milk and room for tall beverage bottles. An anodized aluminum tray provides space for storing meats or ice cubes. The door is mounted for

right-hand opening, but may be easily converted for left-hand installation, using the same hinges and door latch.

The right or left-hand drainboard covers the under-counter refrigerator and is made of stainless steel. The sink bowl, also of stainless steel, has a drain opening large enough for installation of a Westinghouse Waste-Away food waste disposer, if desired.

Freezer Designed for Small Homes, Trailers



KEY NO. B-617

A new 6-cu. ft. Crosley Shelvador home freezer, model SDF-6, designed to meet growing public demand for a compact unit for smaller homes, apartments, and house trailers, has been announced by Crosley Div.

The new freezer incorporates the "Soft-Glo" styling of the larger Shelvador freezers, and has a push-bar latch, built-in lock, and adjustable temperature control.

The freezer is approximately 30 in. long, 27 in. wide, excluding hardware, and 39 in. high. It stores 210 lbs. of food. The unit has a suggested list price of \$269.95.

Self-Serve Cabinet Has Forced-Air Cooling



KEY NO. B-618

DAYTON—A completely new self-contained "Hy-Viz" self-serve ice cream cabinet of full view glass front design, featuring the new "Flowing Cold" refrigerating system, has recently been introduced by Frigidaire.

This new cabinet has a storage capacity for 260 quarts or 560 pints of ice cream and is 80½ in. in length. Frigidaire officials state tests have proved that even the top layer of packages are held at temperatures of 0° F. or below.

Frigidaire's new Hy-Viz Zero Self-Serve case for ice cream and frozen foods uses "Flowing Cold" refrigeration. Slots in top of each divider (white arrow) distribute cold air across top of display. Telescoping cover (black arrow), here partially pulled out from beneath superstructure, protects foods from radiant heat at night.

The Thermopane glass front extends the full length of the cabinet providing a clear unobstructed view of the contents. An attractive illuminated superstructure with six full-color ice cream pictures and two rows of item slides enhances the over-all display. It also has a sliding section that pulls forward over the opening for use as a cover during the night.

This superstructure extends the full length of the cabinet and is 16 in. high.

The display compartment features

a high level, visual mass display 21½ in. wide and contains five adjustable dividers allowing great flexibility in arranging displays. The over-all length of the display section is 71½ in. long with a useable loading height of 14½ in. Net storage volume is 12 cu. ft.

The "Flowing Cold" cooling effect is provided by a centrifugal-type fan located in the coil section below the display, that causes air to flow gently through the big full-length fin and tube type cooling coil.

The cooled air travels underneath the display compartment cooling the bottom of the display section and up through the vertical dividers cooling the sides of each section. The air is then circulated across the top and down the front flue, cooling the top and front of the display, it is further explained.

Refrigeration is provided by a Frigidaire 1-hp. sealed reciprocating compressor located within the cabinet. (Available for 115 or 230-volt operation). A clog-proof condenser is suspended under the cabinet at floor level to receive the coolest room air. It does not require cleaning as it cannot become clogged with dirt or dust, it is stated.

Automatic defrosting is accomplished by a positive but simple electric defrost system which eliminates frost without measurably changing the temperature of the frozen ice cream in the display section. Any condensation that forms is quickly evaporated.

The cabinet is well insulated with 4 in. of fibrous glass in the sides and ends. The bottom is insulated with 5 in. of the same material.

Information Center

For more information on What's New products, current literature and catalogs available, equipment advertised in AIR CONDITIONING & REFRIGERATION NEWS use Key Numbers where designated or specify products advertised and we'll see that you receive this information promptly.

What's New or Current Literature Available

Key No.	Key No.
Key No.	Key No.
Key No.	Key No.
Key No.	Key No.

Products Advertised
(list name, page, and issue date)

(PLEASE PRINT PLAINLY)

Name Title
Company
Street
City Zone State
Type of Business

MAIL THIS FORM TO
AIR CONDITIONING & REFRIGERATION NEWS
Reader Service Dept.,
450 W. FORT ST. DETROIT 26, MICHIGAN

GENERAL SCOOPS the MARKET Again!
with this Terrific VALUE in a SLOPE-FRONT FREEZER

Sensational Buy

Why Pay More

You can't buy a better freezer at any price... Yet, General offers this new, counter-high, formica-top freezer, with a guarantee of quality at this low price.

\$399.00
NET FOR R.T.
Complete with Unit



Our famous MM-4 Full-Vision Display Case is still available at its old "rock-bottom" price of \$249

6'...Counter-High!

FIRST SHOWING... MODEL SF-6
SLOPE-FRONT SELF-SERVICE FREEZER

Why this is America's Best Freezer Value!...

- DUAL-PURPOSE... (1) A modern Self-Service Freezer—6 feet long; (2) Spacious Counter for scale, displays, "check-outs," etc.
- SLOPE FRONT with interior Fluorescent Lighting shows foods with highest visibility—increases buy-appeal.
- FORMICA "LIFE-TIME" TOP can be furnished in any desired length.
- FULL-WIDTH REFLECTING MIRROR provides the extra attraction that means extra sales.
- SELF-CONTAINED with 1/3 H.P. Hermetic Condensing Unit, standard make.
- GLEAMING WHITE ENAMEL on bonderized steel...made to last!
- PAYS FOR ITSELF in added volume and profits—in short time!

UNCONDITIONALLY GUARANTEED!

This guarantee is backed by General's 25 year old reputation. If, on installation, SF-6 Freezer does not perform to complete satisfaction, we will take it back without question, pay return freight costs and REFUND YOUR MONEY IN FULL!



Manufacturers Since 1928

GENERAL REFRIGERATORS CORP.
2011 FIRST AVENUE NEW YORK 29, N. Y.

Service & Supplies

Branch Personnel Shifted By Johnson Service Co.

MILWAUKEE—Trevor D. Reiley has been appointed manager of the Cincinnati branch of Johnson Service Co. here, manufacturer of automatic temperature control systems.

Prior to his promotion, Reiley headed Johnson's Nashville branch and earlier served on the Cincinnati staff. In his new post, he will also direct the operations of Johnson offices in Kentucky, southern Ohio, and part of West Virginia.

New manager of Johnson's Louisville office is Norman A. Ballinger, who comes from the Cincinnati branch.

The Georgia, Florida, Alabama, and Tennessee offices have been placed under the direction of William P. West, Atlanta branch manager.

James R. Potter, formerly of Birmingham, Ala., has joined the sales staff of Johnson's Nashville office. Kenneth B. Alexander, formerly of Macon, Ga., has been assigned to the company's Knoxville, Tenn., office.

Sunbeam Service Station To Be Opened In Phila.

PHILADELPHIA—Sunbeam Corp. has leased 5,500 sq. ft. of space at 721-723 Arch St. here for a service station to be opened about the middle of June, it was reported.

The new Sunbeam Appliance Service Co. here will offer all the facilities of a factory branch, according to Ray Pope, who has been appointed manager of the station. Pope was formerly employed with Sunbeam's service department in Chicago.

Littlefield Rejoins Simons, To Cover Vt., N. H. Areas

HARTFORD, Conn.—Vernon E. Littlefield has rejoined the sales force of Joseph Simons Co. here, the refrigeration equipment wholesaler announced recently.

Littlefield was recently associated with Cartmell's Sales & Service, Burlington, Vt. He will concentrate in the Vermont and New Hampshire district for Simons.



BEN M. McDOUGALL

Ben McDougall Heads Sales for Kennard

ST. LOUIS—Ben M. McDougall has been named sales manager of Kennard Corp. here, it is announced by Sam M. Kennard III, president of the firm.

McDougall joined Kennard three years ago as assistant sales manager, and as such has been in close touch with the sales organization and many of the people engaged in the industry. He is a native of Louisiana and for many years was a salesman of heat transfer products.

He is a member of ASRE, ASHVE, and serves as Kennard's representative to REMA.

BASIC REFRIGERATION CONTROLS

By Service Information Division,
White-Rodgers Electric Co.

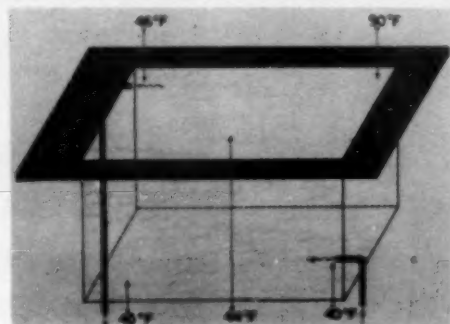


FIG. 19 shows how temperature can vary in water bath and thus complicate problem of locating control feeler bulb.

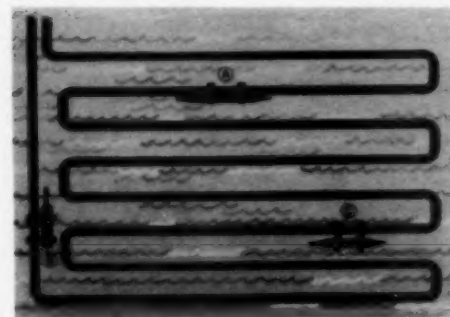


FIG. 20—Generally, it's not recommended to clamp feeler bulb directly against coil (as at "A") in field-assembled commercial installations.

10—Where To Locate Bulb of Control

A water bath installation which has a rather interesting history is shown in Fig. 19. The man who made this installation was one of the best refrigeration men in one of our large cities. However, this man worked almost completely with low temperature applications.

The man had installed three of our refrigeration controls on this particular job. The installer returned the supposedly inoperative controls to us with very nice letter stating that he had used many of our controls but was completely baffled as to why three controls should go bad, or fail to function completely on this one installation.

It would be very gratifying if we could select one individual in this country to whom we could send all controls that might become inoperative. Of course, this is impossible so the fact that these three controls were inoperative on this one installation led to an investigation by our organization.

It was the desire of the owner of this installation to maintain a water temperature of 45°. The feeler bulb of the control was located in the upper right hand corner of the bath as indicated in the drawing.

Note that the water temperature here was 50° when the temperature of the bath toward the center of the unit was 45°. The inlet water temperature to the bath was 40° and a discharge water temperature was 46°. This was discovered by moving a thermometer around the various parts of the bath.

Because of the type of inlet and outlet that was used in this system, the flow of water was directly from the inlet pipe to the discharge line in other words, there was stratification in the tank.

A control located in the upper right hand corner of the bath, as shown in Fig. 19, would certainly not control the bath to a desired temperature.

It was impossible to change the control's location without having the feeler bulb get in the way of the loading and unloading of the bath.

The change that was made in this installation included the installation of a "T" type header where the water entered the bath and a "T" type discharge where the water left the bath. This header, or spreader, was drilled so that there was equal distribution of inlet water and outlet water in the bath.

After the spreaders were installed, the control that had been inoperative now became operative and as far as we know is still installed and

operating perfectly on this installation.

This is an example of what we spoke of previously. Three controls were returned by a good refrigeration serviceman as inoperative. The controls showed during our tests at St. Louis that they were in perfect working condition. The controls became part of that 40% returned that were perfectly okay.

Fig. 20 is an interesting one, primarily because it gives us an idea for various positioning of feeler bulbs and the effect on the location of the operation of the installation. This coil is inserted in a small water bath for demonstration purposes.

In the field you may find that a control does not give you a satisfactory differential. Many times we find that the control is not at fault but the installation is the problem.

Again let us return to the fact that the feeler bulb responds only to the temperature that it is sensing; in other words, the temperature surrounding it, that it comes in contact with.

If we install the feeler bulb against the surface of the tubing of an evaporator, the feeler bulb is going to react to the temperature that it feels. In this case that would be the temperature of the evaporator or coil and not a true temperature.

If we install the feeler bulb some distance away from the coil of the evaporator we definitely cannot control the evaporator coil's temperature but will control either the air temperature or liquid temperature at the point where the bulb is located.

The temperature of a coil varies between the inlet and the outlet, in other words, superheat. At this point we should not worry too much about the problem of superheat inasmuch as that is more a problem with expansion valves than controls.

(To Be Continued)

What the
serviceman
should know
about "VIRGINIA"
REFRIGERATION
products

TO CHARGE A SYSTEM, USE REFRIGERANTS THAT ARE
CONSISTENTLY PURE, CONSISTENTLY SURE

V-METH-L...
WORLD-RENOVED FOR QUALITY

Recharging with "Virginia" Methyl Chloride is a painless way to get rid of your refrigeration troubles. V-Meth-L is made specifically for refrigeration purposes... is consistently pure. The contents of each cylinder is tested and retested to maintain the high quality that has made V-Meth-L world renowned. Remember, the use of a good refrigerant is the first step in preventing costly and time-consuming call-backs due to sludging, copper plating, frozen expansion valves, and other troubles caused by impure refrigerants.



VIRGINIA
Refrigerants

ASK YOUR WHOLESALE
OR WRITE
VIRGINIA SMELTING
COMPANY
WEST NORFOLK, VIRGINIA
PHILADELPHIA • NEW YORK • BOSTON
CHICAGO • DETROIT • ATLANTA

A
TYPHOON
FRANCHISE
IS PROFIT INSURANCE
in Air Conditioning

Air Conditioning Units
1½-20 tons
Multi-Packaged Systems
Up to 60 tons
Prop. 8-Temp. Heat Pumps
2-20 tons
Evaporative Condensers
Packaged Water Chillers

TYPHOON AIR CONDITIONING CO., INC.
794 Union Street, Brooklyn 15, N. Y.

Commercial Refrigeration



FOGEL SALES MANAGERS met with company officials at a recent conference in Philadelphia. Those on hand for the meeting were: Seated (l. to r.) J. E. Mead, Richmond, Va.; V. P. Warren, II, Atlanta; E. A. Terhune, vice president of sales, Philadelphia; Wm. Fogel, president, Philadelphia; I. Fogel, secretary-treasurer, Philadelphia; Walter Brown, Pittsburgh; Robt. R. Slater, Seattle.

Standing (l. to r.) Harry Bell, Boston; Lee Carter, export; Jos. Byrnes, manager order department; Eddy Miller, Evansville, Ind.; Wm. Schmonke, production department; Nick Frederick, refrigeration engineer; Harold Schultz, chief engineer; Wm. Northworthy, chief inspector; J. E. Oliphant, Marion, Ohio; Wm. Oliphant, Detroit; Geo. T. Estfan, Wichita; Ken McGaw, Chicago; Jos. Hermann, Cincinnati; Robt. Hertz, sales engineer, Philadelphia; Herman Walker, San Antonio; Paul Wasson, Cleveland.

Fogel District Sales Managers Meet To See New Designs In Commercial Equipment

PHILADELPHIA—New designs in commercial refrigeration equipment were introduced during Fogel Refrigerator Co.'s annual sales conference of district sales managers, held at the factory here.

New steel frame construction on all models was featured, as were two Fogel models—the "Angle Vision" counter-top freezer and the "Veg-mart" produce merchandiser. A new self-service freezer with automatic

defrost was displayed and several models of mortuary coolers presented.

William Fogel, president of the 51-year-old manufacturing concern, opened the two-day conference with a welcome to the 16 field representatives. The meeting was arranged and "m. c.'d" by E. A. "Terry" Terhune, vice president in charge of sales.

The program started with a tour of the four-acre plant and included inspection of the complete Fogel line of 97 models. During the conference, all phases of operation were covered, including product design, sales and service analysis, and general operating policies.

The meeting was climaxed by a dinner and floor show at a Philadelphia night club.

Among those attending were the following district managers:

Harry Bell, Boston; Walter Brown, Pittsburgh; Robert Hertz and Charles Prepslein, Philadelphia; Ken McGaw, Chicago; Eddy Miller, Evansville, Ind.; V. P. Warren II, Atlanta; Robert Slater, Seattle; G. T. Estfan, Wichita; J. E. Oliphant, Marion, Ohio, and four associates covering the Ohio, Michigan, and West Virginia territory; O. W. Weiss, Denver; and Hermann Walker, San Antonio.

A Service Firm Formed

BUFFALO—The Harlem & Walden Appliance & Service Co., Inc. has been incorporated here with capital of 500 shares. Incorporators are Harry L. Kotecki, Richard E. Kotecki, and Walter Nussbaum.

Carrier Corp. Creates New Territory In Upstate N. Y., Nolph Named as Manager

SYRACUSE, N. Y. — Increasing sales by Carrier Corp. in upstate New York have resulted in the establishment of a new branch office with headquarters in Syracuse, according to C. V. Fenn, manager of the Direct Sales Div.

Clarence A. Nolph has been named as manager of the newly established Syracuse branch office which will serve Syracuse and environs east to Albany, north to the Canadian border, and south to the Pennsylvania state line. He comes to Syracuse from Carrier's Rochester branch and has been in the corporation's sales force since 1940.

The Rochester branch, which formerly covered the entire upstate outside the metropolitan New York district, now has the territory west of Syracuse upstate. Nelson E. Sheldon continues as manager of direct sales in the Rochester office.

Grand Rapids Firm Named To Sell Sweden Equipment

SEATTLE—Sweden Freezer Mfg. Co., maker of fountain freezers, has announced the appointment of Michigan Ice Cream Freezer Sales, Grand Rapids, Mich., as an authorized seller of its equipment.

President of the firm is Charles Conrad, who has just moved the business from Holland, Mich. where he had been established the past 10 years.



Device Defrosts, Cleans, Drains Low Temp. Units

NEW YORK CITY—Money, time, and labor are saved through use of its patented flush defroster for defrosting low temperature equipment, according to Rescor here.

Operating on city water pressure, the device flushes, cleans, and drains soda fountains, ice cream cabinets, and home freezers.

There is no need to shut off refrigeration while defrosting and the entire operation is easily handled "in minutes" by one person, the manufacturer says.

The defroster consists of a siphon-pump and adapter, a length of hose, a finger-grip and gun-type pressure nozzle with control shut-off, and a

suction drain. Siphon-pump and adapter (to fit any type of smooth faucet) are made of nickel-plated cast zinc.

The rubber hose is made with braided rayon and guaranteed to withstand 800 lbs. per sq. in. hydrostatic pressure. The nozzle adjusts from spray type to straight stream flow.

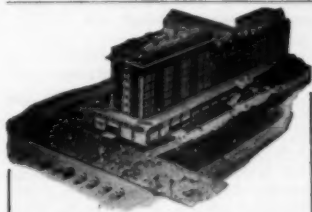
To use the defroster, the operator first connects it to a hot water faucet. He can then quickly flush down the heaviest accumulation of frost or ice coatings on the interior walls of the equipment, Rescor says.

When defrosting is completed, the spray nozzle is replaced with the suction drain, which is set on the bottom of the cabinet. Then the siphoning pump valve is opened and the cold water turned on. This siphons the accumulated water back to the sink drain.

Announced advantages to the user are "time and labor saving; savings of up to 50% on electricity wasted by thick ice coating; removal of all foreign matter and odors from cabinet or fountain interiors; less running time, therefore less wear and tear on compressor; and more uniform temperature at lower operating costs."

Prices of the defroster are: \$21.00 with 25-ft. hose, \$33.90 with 50-ft. hose, \$44 with 75-ft. hose, and \$56.90 with 100-ft. hose.

A model for defrosting units with adjacent water supply (not exceeding 15 ft. between faucet and equipment) is also available. This model is equipped with a non-adjustable open spray nozzle and 15 ft. of 50 lbs. burst-test signal hose, and also includes suction drain, siphon-pump, and adapter. It is priced at \$12.50, according to Rescor.



HOTEL STRAND

A PERFECT HOTEL FOR
YOUR CONVENTION GROUP

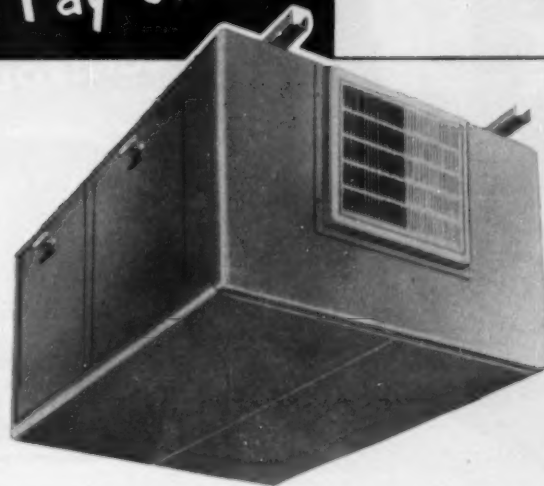
The STRAND, one of Atlantic City's finest Boardwalk hotels is splendidly equipped to be a gracious and efficient host to every requirement of your convention group.

Ample meeting halls, display rooms, private dining rooms, all combined with complete hotel service and a selected personnel to cater to your every want.

For Special Rate Plan—Address Convention Manager. Exclusive Penna. Ave. and Boardwalk

Make
Ceiling Space
Pay-off!

Why not put your ceiling
to use . . . instead of
wasting valuable floor
and wall space.



4 SIZES
3 to 10 TONS

AIR CONDITIONING

by **KRAMER**

Equipped with squirrel cage pressure fans that can be used with either ducting or free discharge. For free discharge a two-direction adjustable grille is furnished. Motors and fans are rubber mounted for smooth and quiet operation. Compressor can be remote, eliminating all compressor noises in the conditioned area. Standard fiberglas filters are used. Available with either direct expansion or water coils. Heating coils can be furnished.

WRITE FOR BULLETIN AC-171

KRAMER TRENTON CO. • Trenton 5, N.J.

It's a jewel... the new No. 156
SPRING and SUMMER

HARRY ALTER'S **DEPENDABOOK**

**REFRIGERATION
Parts & Supplies**
plus
**TELEVISION • RADIO
HEATING
ELECTRIC MOTOR PARTS
AIR CONDITIONING**

Write for your copy NOW!

Service doesn't falter when it comes from Harry Alter

The HARRY ALTER CO. Inc.
3705 S. MICHIGAN AVE.
CHICAGO 16, ILL.
131 LAFALETTE ST.
NEW YORK 13, N.Y.

Refrigeration Problems

and their solution

by Paul Reed

For Service and Installation Engineers



Paul Reed

Automatic Defrosting (9)

Another way of defrosting low temperature evaporators is the water defrosting method. It has been chiefly used on the larger installations, but in recent years it has become popular for locker plant work and low temperature coolers. It is beginning to make a bid for use on some of the smaller commercial refrigerators and other fixtures.

As the name "water defrosting" implies, defrosting is done by merely flowing water over the frosted, icy evaporator, and the heat in the water melts the frost and ice. The defrosting water and the melted ice then flow away via the drain pan and drain line.

DEFROSTING BY TAP WATER

Ordinarily, the water for defrosting comes from the water mains, and after it has accomplished its purpose, is wasted to the sewer. For very large evaporators, it could very well prove to be more economical to catch the drain water, reheat it with an

exhaust steam coil or other heat source, and re-circulate it by a circulating pump back over the evaporator.

On small installations, and particularly if fairly warm water at a reasonably low cost is available, it is usually more economical to merely waste the water, rather than to try to salvage it.

The amount of water required for defrosting is not as large as might be supposed. If the defrosting water is chilled, say 15° by the evaporator, 1 lb. of water will absorb 15 B.T.U. and 1 gal. of water will absorb 125 B.T.U. It requires approximately 160 B.T.U. to warm 1 lb. of 0° ice to 32° and melt it, so 1 lb. of ice on the evaporator could be disposed of by slightly more than 1½ gal. of water.

Even a rather good-sized evaporator on which 20 lbs. of ice and frost has accumulated, might use no more than 25 or 30 gals. of water to defrost it. Particularly, in areas in which tap water is warm, water may prove to be the most economical source of heat for defrosting.

Inasmuch as the water flows over the evaporator, it is in good contact with the ice, so defrosting is quite rapid. If the spray heads are properly sized, average tap water can

defrost the evaporator in about five minutes or less.

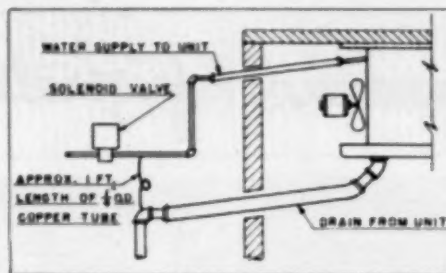
On the other hand, applying water defrosting to small fixtures, especially of the portable or semi-portable types presents some problems in installation and mobility.

The mechanical means of accomplishing water defrosting need not be elaborate. They consist principally of a spray head mounted above the evaporator, water piping to this spray head, and an adequate drain pan and drain line.

SELF-DRAINING WATER AND DRAIN LINES

An important consideration must be to keep the water lines, spray head, drain pan and drain line completely drained of water except during actual defrosting, to prevent their freezing. Being inside the 0° refrigerated space, they would freeze otherwise.

To assure that all water will be drained at once after a defrosting period, all of the lines, pan and spray head must be self-draining as soon as the water is shut off. If the drain pan and drain line are properly designed, with plenty of pitch (1½ in. per ft.) and no traps inside the re-



(Courtesy Refrigerating Engineering Inc.)

Fig. 10—Water and drain piping diagram for water defrosting, using an electric solenoid stop valve, and ¼-in. copper tubing for drain-off following the defrost period.

frigerator, there should be no difficulty in their draining rapidly after the defrost operation.

If the drain line inside the refrigerator must be rather long, it may be advisable to insulate it with an inch or so of some good pipe insulation. Flexible rubber hose of adequate size is also used and has the added advantage of absorbing vibration from blower type evaporators.

The water stop valve, whether of the manual or electrically operated type, should be just outside the refrigerated room. The water line from this valve to the spray head should have an uninterrupted upward pitch (also of 1½ in. per ft.) with no traps, from the water stop valve to the spray head.

Even though the water line and spray head are self-draining, there must be some way for them to be open for draining after defrost, and yet closed during defrost when the water pressure is on the spray head and water line beyond the stop valve.

DRAINING THE WATER LINE

One way is to use a manually operated "three way" stop valve; that during defrosting, opens the water line to the spray head and closes the drain from the spray head; but at the end of defrosting, closes the water line and opens the spray head to its drain, so that the water in the spray head and the length of water line between the stop valve and spray head can drain out.

A more simple way to drain the spray head and water line through a "bleeder tube" is shown in Fig. 10. During defrosting, full water pressure is on the spray head, and also on the small "bleeder tube" between the outlet of the stop valve and the drain line. Consequently, water flows from the spray head and over the coil.

At the same time, water flows through the "bleeder tube" to the drain line, but since it is only a ¼ in. o.d. tube, the amount of water wasted through it to the drain is not great enough to be of consequence. Moreover, water is wasted through this bleeder tube only during the defrost cycle, and since the defrosting period amounts to only a few minutes, a time or two per 24 hours, the loss of water through the bleeder tube is negligible.

STOP EVAPORATOR FANS DURING DEFROSTING

If the evaporator to be defrosted is the blower type, its fan or fans should be stopped at the start of defrosting to prevent them blowing water spray into the refrigerator. Some evaporators also have louvers that may be closed manually or automatically when defrosting starts, and opened when defrosting is completed.

AUTOMATIC WATER DEFROSTING

Water defrosting can easily be done automatically by using a clock timer set to give one or more defrosts per 24 hours, as the demands

of the specific equipment or application require.

The timer is the two circuit type. One circuit is for the water stop valve and the other is for the compressor motor and evaporator fans if any. The sequence of automatic defrosting is:

1. To start defrosting, the timer operates both circuits at the same time. It closes the circuit to the water stop valve, opening it and starting water to flow over the evaporator; and simultaneously it opens the other circuit, thus stopping the compressor fans.

2. Defrosting continues as long as the evaporator requires it and as governed by the time adjustment of the timer, usually about five minutes, possibly less if defrosting is done more than once per 24 hours.

3. After defrosting is completed, the timer opens the circuit to the water stop valve, so it closes and stops the flow of water to and over the evaporator, and the drain pan and drain line carry the water away in the usual manner. Water in the water line between the water stop valve and the spray head drains backwards in the line, and to the main drain line by way of the ¼-in. bleeder tube.

4. After a minute or so, to insure that all but a film of water has drained off, the timer closes its "delayed action" circuit, the one to the compressor motor and fan motor. Assuming that the operating thermostat or low pressure control is closed, calling for refrigeration, the compressor and fans start.

PUMP DOWN DURING WATER DEFROSTING

Water defrosting by tap water does not heat up the evaporator to as high a temperature as some other methods of defrosting, so the suction pressure is not apt to rise high enough during defrosting to cause excessive suction pressures to overload the compressor at the start of the normal refrigeration cycle immediately following the defrosting cycle.

If the timer is properly adjusted as to length of time that water is flowing over the evaporator, the evaporator temperature should be only slightly above 32° at the end of the defrost cycle.

Nevertheless, if it is desirable on a particular installation on which water defrosting is used, to pump the evaporator down and free it of refrigerant during defrosting, a liquid line solenoid valve may be used. Then instead of the timer directly stopping the compressor, it closes the liquid line solenoid valve. The low side pumps down and the compressor is stopped by a low pressure control.

WATER DEFROSTING PATENTED

Water defrosting is covered by patents held by Refrigerating Engineering, Inc., Los Angeles, and this method may not be used without their permission.

Two Vilter VMC Freon Compressors, installed in a Kansas City bank, equipped with Allen-Bradley trouble free Solenoid Starters.



Why are Allen-Bradley automatic starters so popular for refrigeration and air-conditioning service? . . . Because they are trouble free. Only ONE moving part. No pivots, pins, or bearings to corrode or stick . . . no jumpers to break. You install them . . . and forget them!

No contact maintenance . . . Allen-Bradley cad-

mium silver alloy contacts never need cleaning, filing, or dressing.

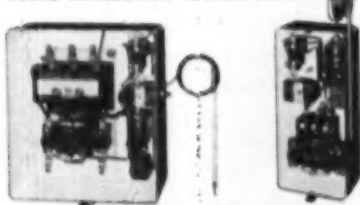
Dependable overload relays . . . Allen-Bradley thermal relays are accurate and always dependable . . . even after long service.

The Allen-Bradley trademark stands for millions of trouble free operations.

Allen-Bradley Co., 1313 S. First St., Milwaukee 4, Wis.

Typical Refrigeration Controls

SPECIAL REFRIGERATION CONTROL UNITS



The two units above show Allen-Bradley special refrigeration control units consisting of Solenoid Starter, High Pressure Cutout, Thermostat, and Manual Starting Switch. Size ½ Unit at left, Size 1 Unit at right.

PRESSURE AND TEMPERATURE CONTROLS



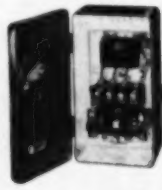
A-B Bulletin 836 Pressure Control and A-B Bulletin 837 Temperature Control. Accurate, rugged, compact units.

AUTOMATIC STARTER



A-B Bulletin 709 Solenoid Starter. Note white interior.

COMBINATION STARTER



A-B Bulletin 712 disconnect switch type combination starter. Saves installation time.

ALLEN-BRADLEY SOLENOID MOTOR CONTROLS



ARE YOU CHANGING YOUR ADDRESS?

If you are planning to move or want the NEWS sent to a different address, please use this coupon. Saves time and assures you uninterrupted service. Copy old address from NEWS wrapper if possible.

Old address:

New address:

name

name

company

company

address

address

city

state

city

state

city

state

city

state

My business is:

This information helps us to make the NEWS serve you better.

Send to: AIR CONDITIONING & REFRIGERATION NEWS, 450 W. Fort St., Detroit 26, Mich.

Forum Sees Weaknesses In Distribution--

(Concluded from Page 1, Column 4)
serve the customer where he wants to be served. This has led to the development of the suburban "one-stop" community shopping center, he said, as a descendant of the old general store.

PRESENTS DATA ON BRANCH STORES

On this subject, "Blees stated: 'I have studied with great interest a report on 'Operating Results of Department and Specialty Store Branches' that was prepared by the Harvard School of Business Administration. It is the result of a three-year study by Milton P. Brown, assistant professor at Harvard.

'The study is based on material gathered from 25 department stores with 56 branches, and 17 specialty stores with 48 branches. Not all of these are in suburbs, but probably most of them are.

'In percentage of net sales, the branches have considerably fewer returns of merchandise than the main stores; they also have lower mark-downs, lower payroll costs, and lower advertising rates.

'What is more important, the branch expense per transaction averaged one dollar and one cent, while the main stores showed an average expense of one dollar and thirty-nine cents. To management, those are the most significant thirty-eight cents in American retailing today.'

Blees said another point of customer service is store hours.

'The store that rigidly sticks to its 9-to-6 schedule had better take another look at its sales volume and cash receipts,' he advised.

'Today, Americans have less and less time for us to sell them. They have so many things demanding their time.

COMPETING FOR TIME AS WELL AS DOLLARS

'As citizens, they must concern themselves with the elections, the need for ethics in government, our nation's role in the world. As parents, they must look after the education, upbringing, and happiness of their sons and daughters. As married folks, husbands and wives must find time to live a full life together, to snatch an hour or two of entertainment, for sports and vacations. We compete as much for their time as we do for their dollars.

'They do not have to come to us any more to make us sell them our products. We must go to them, put our products before them—whenver it is convenient to them.'

Continuing, Blees said: 'It just isn't reasonable to expect people to gulp down lunches, and hurry over the neighborhood emporium for some hit-and-run shopping. At best, you can sell a pair of stockings that way. No cars. Not furniture, or a television set, or kitchen equipment...

'What is the answer? Keep your store open longer? No, not necessarily, but keep it open so people can drop in after supper—when they're both comfortable and relaxed and in a buying mood; not when they're run down, harassed and hungry.'

DISCOUNT SELF-SERVICE AS BIG FACTOR

In short talks which launched the question-and-answer period, members of the panel forecast a continued need for retail selling. Most of the panel discounted self-service as a big factor in selling major appliances.

Said Sweeney: 'I don't think the public is yet ready to buy big ticket appliances on a self-service basis. Nothing takes the place of a sales story told by a well trained appliance salesman.'

Weldon said self-service in this field is "far from a trend," while Stratton pointed out that self-service in durable goods "can work only if we don't expect it to do all of the selling job." And Sampson predicted diminishing emphasis on self-service.

In his talk, Waller urged more persuasive and more specific advertising. Weldon held that "the information which most profoundly impresses a clerk comes from the customers he served."

Spirited comments developed in the panel session on price reductions and on questions relating to manufacturer-distributor-retailer relationship. Increased cooperative advertising allowances were forecast and some differences of opinion arose about whether advertising budgets should be based on anticipated sales

or a combination of these and other factors.

Regarding advertising, Parsons commented that "we haven't really made people want to buy goods; our advertising approach, often loaded with fictitious price claims, is not good." Stratton added that because of some false advertising, the public is tending to disbelieve all advertising claims.

Stratton protested the policy he claimed manufacturers have of telling distributors what they have to take on new line openings.

'This is rough on the distributor and also makes it rough on our retailers,' he said, "since the distributor has to seek additional outlets to get rid of the stuff."

Blees replied that retailers are

partly to blame because they won't give sales and other information to distributors.

'No manufacturer I know wants to overbill,' he declared. "If the dealer gives his total sales inventory confidentially it would help the distributor."

Both Blees and Sweeney agreed that sound freemer-food plans will survive.

Sale of major appliances in food stores was termed a development in Texas and California which was not likely to expand into a national trend.

Sommers-Brown Moves

MEMPHIS, Tenn. — Sommers-Brown, authorized General Electric dealer, for the past 12 years located at the corner of Union and Third, has moved to new and larger quarters at 2696 Lamar Ave.

5-Year Warranty--

(Concluded from Page 1, Column 2)
a letter to manufacturers explaining RACCA's position in the matter and asking for their comments.

Reporting on replies, the association said all but the one manufacturer were emphatically against further continuation of the five-year warranty.

"Some of them, however, said they must meet competition and would substitute a five-year warranty if competition warranted it," RACCA added.

The association said a representative of the one manufacturer who favored the five-year warranty stated that even in his company only 10% of the contractors were buying such a warranty.

Small Firms To Share In Industrial Expansion

WASHINGTON, D. C.—The Defense Production Administration and the Small Defense Plants Administration have announced an agreement which is designed to assure small business firms a definite share in all new industrial expansion programs.

The agreement allows SDPA to reserve a specific portion of any expansion program exclusively for small business. This portion will be held open for 30 days to allow small firms a chance to participate in the programs.

Through its regional offices, SDPA will notify small concerns of opportunities to take part in DPA programs.

NEXT QUESTION, Mr. Boyersmith!

Graber's
JUNE 1952
DETROIT, MICHIGAN

March 15, 1952

Mr. George F. Taubeneck
450 West Fort Street
Detroit 26, Michigan

Dear Sir:

The appliance dealers of this city are considering an association.

We would appreciate your judgment and advice as to how to formulate a concrete plan and regulate same.

If possible I should like to have the fundamentals used by other associations. We believe that some type of organization will be beneficial to dealers and customers alike.

Thanking you in advance for a prompt reply,
I am,

Very truly yours,

J. F. Boyersmith
Mgr. Appliance Dept.
Graber's
Hutchinson, Kas.

Graber's
JUNE 1952
DETROIT, MICHIGAN

March 17, 1952

Mr. George F. Taubeneck
450 West Fort Street
Detroit 26, Michigan

Dear Sir:

After reading Chapter 24 in "Both Feet on the Ground" I have the answer to many of the questions I asked in my letter to you of March 15. Please disregard my letter unless you have more suggestions for our benefit on the subject.

I am,

Yours truly,

GRABER FURNITURE COMPANY

J. F. Boyersmith

JFB:jo

THE QUESTION:

How to formulate a concrete plan for and regulate an Appliance Dealers Association?

THE ANSWER:

CHAPTER 24 IN—

"BOTH FEET ON THE GROUND"

The Appliance Dealer's Handbook

Every day appliance retailers like Mr. Boyersmith tell us that their copy of Both Feet On The Ground provides the right answers to hundreds of problems dealers must face in today's increasingly competitive market.

Both Feet On The Ground is not only written in the dealer's language, it is based on actual case histories that you can apply to your own business in your own way.

That's why dealers themselves call George F. Taubeneck's new book "The best investment of a lifetime."

APPLIANCE DEALERS!

Save Precious Time—Increase Profits with This Amazing "Answer Book"

Here are just a few of the sure fire aids:

- How to compete against the large chains and department stores.
- The difference between value and price.
- The effect of price cuts and discounts, on volume.
- Increasing the impact of your window displays.
- Home demonstrations versus store demonstrations.
- How to judge the advertising value of a newspaper.
- Quiz for service position applicants.
- What a service record should show.
- Building a service business.
- Effectiveness of the various advertising media.

Before
Last Copies
Go — Mail
FREE TRIAL
Coupon
Today!

CONJURE HOUSE
450 WEST FORT STREET, DETROIT 26, MICHIGAN

O. K. Gentlemen, Send me a copy of "Both Feet On The Ground" on your 7 DAY NO RISK PLAN. I will examine the book for one week. If I return it there'll be no questions asked, no obligation. But if I decide to keep it I'll remit only \$5.95 plus postage, for this wonderful volume. I choose this payment plan:

- ☐ \$5.95 enclosed. We bear all packing and shipping expense. Money-back guarantee if you return the book.
- ☐ Bill me for the total amount. \$5.95 plus postage.
- ☐ 60 DAY THREE PAY PLAN. Bill me for \$2.50 now and \$2.00 per month until balance is paid.

Name Company

Address

City Zone State

PATENTS

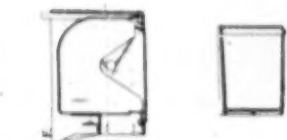
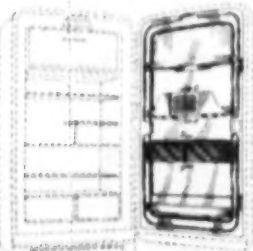
Week of April 1
(Continued)

1,942,381. AIR DIFFUSING OUTLET FOR VENTILATING SYSTEMS. Frank J. Smith, Monaca, N. Y., assignor to Ansonia Corp. of America, New York.



The ornamental design for an air diffusing outlet for ventilating systems.

1,942,387. REFRIGERATOR CABINET. John H. Walter, Grosse Pointe, Mich., assignor to Motor Products Corp., Detroit.



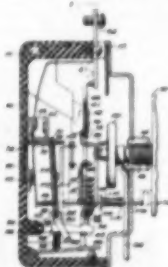
The ornamental design for a refrigerator cabinet, substantially as shown.

Week of April 8

1,942,388. THERMOSTATIC CONTROL SWITCH. Russell F. Garner, Youngwood, Pa., assignor to Scherishaw-Fulton Controls Co., Greensburg, Pa., a corporation of Delaware. Application Feb. 13, 1950, Serial No. 144,319. 18 Claims. (Cl. 300-140.)

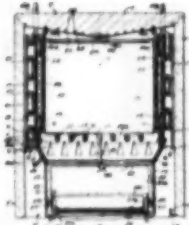
1. A thermostatic control device comprising a main switch, temperature responsive means for operating said main switch, an elongated flexible switch arm connected at one end to said main switch, first contact means initially spaced from one side of said switch arm, second contact means positioned on the opposite side of said switch arm and longitudinally spaced from said first contact means, said switch arm having an inherent bias toward engagement with said second contact means, third contact means positioned adjacent said first contact means but beyond the range of movement of said switch arm, a second flexible switch arm connected to said first contact means and having an inherent bias toward engagement with said third contact means.

means on said first switch arm operatively engageable by said second switch arm, a toggle plate operatively engageable with both said switch arms, means for operating said toggle plate in one direction for moving the first said switch arm into engagement with said first contact means and moving said second switch arm out of engagement with said third contact means, said first switch arm being



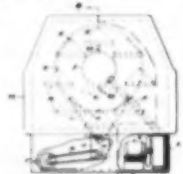
biased by operation of said toggle plate between said connected and thereof and said first contact means for disengaging said second contact means, and latching means for said toggle plate effective upon movement thereof in another direction for maintaining said engagement between said first switch arm and said first contact means while said switch arm returns under said bias thereof toward engagement with said second contact means, said latching means being effective for maintaining said second switch arm out of engagement with said third contact means.

1,942,389. REFRIGERATOR. Arthur J. Padigo, Richmond, Va. Application Dec. 8, 1947, Serial No. 789,507. 13 Claims. (Cl. 68-69.)



1. A refrigerating apparatus comprising, in combination, a case having a top wall, a horizontally disposed grid supported within the upper portion of the case, said grid constituting a bottom for an ice chamber and said wall forming the top of the ice chamber, side walls for the ice chamber spaced from the adjacent walls of the case to provide flange, said side walls terminating below the top wall of the case to provide an ice chamber with an open top, the under face of the top wall of the case having two downwardly inclined portions extending from opposite sides toward and joining at the center of said chamber, the pointing line of said portions being below the top edges of the side walls of the ice chamber.

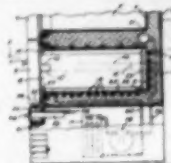
1,942,390. REFRIGERATED DISPLAY CASE. John E. Kinsey, Spokane, Wash. Application Nov. 7, 1950, Serial No. 194,437. 9 Claims. (Cl. 68-69.5.)



1. A display case comprising an outer casing, a stationary refrigerated cylinder mounted therein, food trays mounted to rotate about the cylinder, and scrapers mounted to rotate with the food trays and passing over the cylinder surface to scrape accumulated frost therefrom.

1,942,391. FROST REMOVING ARRANGEMENT FOR REFRIGERATOR.

CABINETS. Leonard W. Atchison, Erie, Pa., assignor to General Electric Co., a corporation of New York. Application Oct. 14, 1949, Serial No. 131,389. 7 Claims. (Cl. 68-102.)



1. A refrigerator cabinet including an outer wall, a spaced inner wall defining a compartment, a drawer slidably received within said compartment, means adjacent said inner wall for cooling said compartment, said inner wall being maintained at a temperature on which frost forms thereon, and a scraper secured to said drawer for scraping frost from said inner wall when said drawer is moved.

1,942,394. REFRIGERATOR DEFROST PRODUCT DISPOSAL SYSTEM. John E. Cochran, Cincinnati, Ohio, assignor to Avco Mfg. Corp., Cincinnati, Ohio, a corporation of Delaware. Application July 28, 1950, Serial No. 178,355. 11 Claims. (Cl. 68-103.)



1. In a refrigerator the combination of an evaporator, a removable baffle and moisture collecting member having a heat-conductive top cover, a defroster heating element mounted beneath said evaporator, said cover having an upwardly projecting portion in thermal engagement with said heating element, and means for slidably mounting said member below said element.

1,942,395. LID FOR REFRIGERATING APPARATUS. Abraham V. Frohnapel, Detroit, Mich., assignor to Wash-Kelvinator Corp., Detroit, Mich., a corporation of Maryland. Application June 13, 1947, Serial No. 754,378. 3 Claims. (Cl. 230-34.)



1. A rectangular lid for closing an opening in the top of a refrigerator cabinet comprising, an inner relatively deep pan member having an outturned flange extending along three sides thereof and having an intumed flange extending along the fourth side, an outer relatively shallow pan member having an outer marginal portion seating on said flanges, an intermediate pan member conforming to the contour of said outer pan member having an outer marginal portion between said panel, a clamping-strip of U-shaped cross section receiving and clamping said outturned flange and marginal portions together along said three sides, and a hinge member clamping said intumed flange and said outturned flange and the marginal portions of said intermediate pan member together along said fourth side.

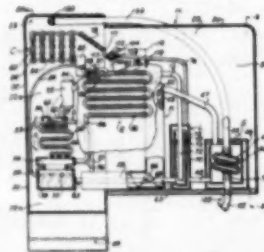
AVAILABLE FOR LICENSING OR SALE

The following patent is assigned to the United States as represented by the Secretary of Agriculture. Licenses to practice the inventions are issued on a royalty-free, non-exclusive, non-transferable revocable basis.

Application for licenses should be addressed to the Bureau of Agricultural and Industrial Chemistry, U. S. Department of Agriculture, Washington 25, D. C. Pat. 2,540,537. Defrosting Indicator. Patented July 17, 1951. The device is adapted to be attached to the surface of a package of frozen food and provides a visible signal when the package is subjected to excessive temperatures. Development of the signal depends on diffusion of a solvent containing a dye through a porous sheet. An important feature of the device is that, though positioned on the surface of the package, it gives the visible signal only on thawing deep within the package. Exposure of the package to above-freezing temperatures for short periods of time does not cause development of the signal. Groups 20-24-37; 35-64. Reg. No. 47,013.

Week of April 15

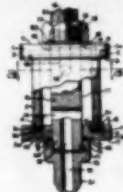
1,942,396. PORTABLE REFRIGERATOR. Marion F. Knay, Long Beach, Calif., assignor to Robert T. Collier, Wilmington, Calif. Application April 10, 1944, Serial No. 530,336. 3 Claims. (Cl. 68-119.5.)



1. In combination in a vehicle: an internal combustion engine adapted to propel said vehicle and having hot fluid disposal means; a vertically extending chamber having an air intake at its

bottom and an air vent at its top; refrigerant producing apparatus disposed in said chamber including a generator adapted to liberate refrigerant gas from a gas-containing absorption liquid in the generator; a compartment; a refrigerating element disposed in said compartment, said element being operatively connected with said apparatus to receive refrigerant therefrom; means connecting said hot fluid disposal means with said generator to supply heated fluid from said engine for liberating refrigerant gas from said absorption liquid; and an exhaust pipe connected with said engine for conveying exhaust gases, said pipe having an outlet disposed adjacent said air vent and adapted to induce a draft of cooling air through said chamber.

1,942,398. SIGHT GLASS FITTING FOR PIPING SYSTEMS. Philip Beard, Cincinnati, Ohio, assignor to Coo-Kier Products, Inc., Cincinnati, Ohio, a corporation of Ohio. Application Sept. 30, 1948, Serial No. 51,907. 9 Claims. (Cl. 128-37.)



1. A sight glass fitting for piping systems containing circulating fluids, comprising: a hollow cylinder with transparent walls, and closure means with centrally located openings therein positioned and secured to ends of said hollow cylinder to form a transparent chamber and centrally located means with axial and lateral spaced passages in the ends thereof to interrupt and change the direction of the flow of said circulating fluids into and out of said hollow cylinder, secured in the openings of said end closure means to secure said hollow cylinder to said end closure means and other means for securing said sight glass fitting in said piping system and securing said end closure means to said hollow cylinder and centrally located means to form an inspection medium for fluids flowing through said piping system.

1,942,399. SPILL GUARD AND ICE TRAY. Lloyd G. Copenman, Metamora, Mich., assignor to Copenman Laboratories, Flint, Mich., a corporation of Michigan. Application Oct. 23, 1947, Serial No. 708,156. 7 Claims. (Cl. 68-106.5.)

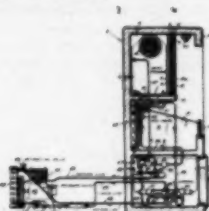
1. An improved ice tray grid, a plurality of dividing members formed of flexible, resilient material and adapted to

lie within a tray, and a band around the outside upper corners of said dividers formed integrally therewith having a portion extending in a continuous band around the grids below the normal tray



height to serve as a seal in cooperation with the sides of a tray, and a portion extending above and over the dividing members in a continuous band joined with the sealing band.

1,942,399. COMBINATION DAIRY, VEGETABLE AND STORAGE REFRIGERATOR. Virgil F. Warren, II, Atlanta, Ga. Application June 3, 1948, Serial No. 31,944. 9 Claims. (Cl. 68-69.5.)



2. A refrigerator having a front wall including a hood depending from the top thereof, said front wall having a large opening co-extensive with the width of the refrigerator, a refrigerated cabinet inset with respect to said hood and opening and disposed in the upper portion of said refrigerator, horizontally slidable doors for closing the front of said cabinet, an open type refrigerated bin disposed beneath said cabinet and extending below the lower edge of said front opening so that the user may extend his head into said front opening and help himself to products contained in said bin, and means for refrigerating said cabinet and said bin.

MISSING SOMETHING?

More and better useful information is yours for the asking. See "What's New" page.

The KEY to AIR CONDITIONING

by James J. LaSalvia

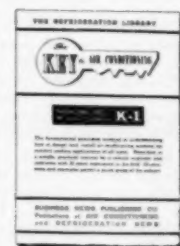
COMPLETE AT LAST!

A modern series of 3 simplified, practical training manuals and reference books to help you with the layout and installation of comfort air conditioning. The Key to Air Conditioning gives you a whole picture of comfort air conditioning in crystal clear language. It gives immediate answers to almost every problem in layout and installation. It covers the important details that add up to larger profits on your air conditioning jobs. The author, James LaSalvia, is an experienced engineer of 30 years with extensive background in teaching and writing.

MANUAL NO. K-1—The physics of air conditioning; use of charts; methods of ventilation; figuring air requirements; refrigeration problems in air conditioning; use of fans; methods of air distribution. Psychrometric chart included with book.

MANUAL NO. K-2—Sheet metal ducts (sizing methods, problems of design); discussion of air cleaning devices; heat transmission coefficients; problems and tables for figuring heat gain; air through cooling coils; selection of cooling coils, expansion valves, compressors, and water cooling coils.

MANUAL NO. K-3—General discussion of heating systems; selection of heating coils (air friction, condensation); description and operation of evaporative condensers; water cooling towers; automatic controls; piping refrigerant, water, and steam; and insulation problems.



IN 3 VOLUMES
\$2.00 Per Copy

CLIP AND SEND THIS HANDY ORDER FORM

Business News Publishing Co.
450 West Fort Street
Detroit 26, Michigan

Please send the following Key to Air Conditioning books.

K-1, \$2.00 each, copies. ☐ check enclosed
K-2, \$2.00 each, copies. ☐ bill me
K-3, \$2.00 each, copies. ☐ bill me

Name
Address
City Zone State
*Prepaid orders save shipping charges.

6-2-52

Subscribe Now

Receive the greatest trade paper in the Industry—AIR CONDITIONING & REFRIGERATION NEWS. Published every week. Brings you latest news and vital information on household refrigeration, commercial refrigeration, air conditioning, home freezers; manufacturing, distributing, retailing, servicing, and contracting. Only \$5 per year, 52 issues.

Fill in coupon and mail today

AIR CONDITIONING & REFRIGERATION NEWS
450 West Fort Street, Detroit 26, Michigan

Gentlemen: Send the NEWS for one year.

☐ \$5 enclosed ☐ Bill me ☐ Bill the company

Name

Company

Street

City Zone State

6-2-52

Government Contracts

DEPARTMENT OF DEFENSE

It is not necessary to refer solely to the issuing office for additional data on a bid invitation issued by any of the following U. S. Army Ordnance Offices: Ordnance Tank Automotive Center; Detroit Arsenal; Frankford Arsenal; Picatinny Arsenal; Watertown Arsenal; Rock Island Arsenal; Springfield Armory; Watertown Arsenal; and Watervliet Arsenal. Complete information on any purchase listed by any of these offices alone can be obtained from the Ordnance District Office nearest you. Its address is on file in your nearest Department of Commerce Field Office. Do not ask an Ordnance District Office for information on a purchase unless it is listed by one of the above-named offices. Ordnance District Offices do not have information on any other purchases.

Invitations for bids numbers will be followed by the letter "B." Requests for proposals or quotations will be indicated in this column by the letter "Q" or, if numbered, the number will be followed by the letter "Q."

Description	Quantity	Invitation No.	Opening Date
Commandant Of The Marine Corps, Washington, D. C. Att: Supply Dept., Procurement Section			
Refrigerators, electric, self-contained, reach-in type II, size 60, Federal spec AA-R-211B	50 ea	1196B	10 Jun 52
Cabinet, ice cream storage, self-contained, electric, 6 hole, double row, approximately 25-gallon storage capacity, Military Spec MIL-C-20545 with exceptions	50 ea	1196B	10 Jun 52

District Engineer, Portland District, Corps Of Engineers, Portland, Oregon

Description	Quantity	Invitation No.	Opening Date
Construct hatchery bldg. with ice plant and refrigeration system residences, garages, sheds, gasoline dispensing unit, hatching ponds, water supply and sewer system including drilled well pump house and steel water tank at Leabur, Oregon.	Job	Civeng 35-026-52-200B	13 Jun 52

Lima Ordnance Depot, Buckeye Road, Lima, Ohio

Description	Quantity	Invitation No.	Opening Date
Furnishing all plant labor, material appliances and equipment and performing all operations required in connection with removal of a mechanical ventilating exhaust system in Section A Prod Building.	Job	(33-154-53-22-B)	12 Jun 52

Commanding Officer, Frankford Arsenal, Philadelphia, Pennsylvania

Description	Quantity	Invitation No.	Opening Date
Phosphate coating system, air conditioning.	Jobs	(ORD-52-1159)	5 Jun 52

U. S. Naval Ordnance Test Station, Inyokern, China Lake, California

Description	Quantity	Invitation No.	Opening Date
Air conditioning, heating, Hanger No. 2-NAF	Job	35166	6 Jun 52

Purchasing And Contracting Office, Camp Gordon, Georgia

Description	Quantity	Invitation No.	Opening Date
Install two hundred twelve (212) window fans and seven (7) attic exhaust fans, Camp Gordon, Georgia	Job	(09-067-53-63B)	9 Jun 52

Office of the Engineer, Fort Dix, New Jersey

Description	Quantity	Invitation No.	Opening Date
Replacement of pressure and temperature relief valves alteration	Job	(ENG 28-913-52-28B)	10 Jun 52

Commanding Officer, Chemical Corps, Procurement Agency, Army Chemical Center, Maryland

Description	Quantity	Invitation No.	Opening Date
System-heating and cooling-liquid medium in accord with purchase description SFPD-1, dated April 52	1 ea	52-616-C	10 Jun 52

GENERAL SERVICES ADMINISTRATION

Description	Quantity	Invitation No.	Opening Date
Galveston District Corps of Engineers, 606 Santa Fe Building, Galveston, Texas			
12 ton Freon refrigerating machine, U. S. Post Office and Court House, Rome, Ga.	Job	CR4-249	6-17-52

Business Service Center, Region 3, General Services Administration, Washington, D. C.

Description	Quantity	Invitation No.	Opening Date
Air cond. conference room, etc	Job	GS-R3-B-1515	6-5-52

General Services Administration, Federal Service, Denver, Colorado

Description	Quantity	Invitation No.	Opening Date
Freezer, Ice Cream and Hardening Cabinet	1 ea	4641	6-5-52

U. S. DEPARTMENT OF AGRICULTURE

Description	Quantity	Invitation No.	Opening Date
U. S. Department of Agriculture, Bureau of Animal Industry Administrative Services Division, Washington 25, D. C.			
Walk-in Coolers	8 ea	BAI-195-52	3 Jun 52

CONTRACTS AWARDED THROUGH MAY 23

Department Of The Navy, Bureau of Ships, Washington 25, D. C.

Description	Quantity	Invitation No.	Opening Date
Refrigerating System Training Assembly, 110 volts, single phase, 60 cycles.—50, \$31,607.—York Corp., Washington, D. C.			

Sacramento District, Corps of Engineers, U. S. Army, Wright Bldg., 1200 8th St., Sacramento 3, California

Description	Quantity	Invitation No.	Opening Date
Rehabilitation of Refrigeration Facilities, Cold Storage Plant, Travis Air Force Base, California.—1 Job, \$13,576.—Coudaire Refrigeration Co., 425 18th Street, Sacramento, California.			

General Services Administration, 1114 Commerce Street, Dallas 2, Texas

Description	Quantity	Invitation No.	Opening Date
Air Conditioning, Crane Bldg.—1 Job, \$16,575.—Burden Air Conditioning Co., 1321 Flowman Avenue, Dallas, Texas			

Headquarters, U. S. Marine Corps, The Quartermaster General, Washington 25, D. C.

Description	Quantity	Invitation No.	Opening Date
Coolers.—1,000, \$182,753.—Sunroc Co., Glen Riddle, Pennsylvania			

Chicago Quartermaster Depot, QM Purchasing Division, 1819 West Pershing Road, Chicago 9, Illinois

Description	Quantity	Invitation No.	Opening Date
52-1048 B Dispenser, Drinking Water.—Various, \$876,798.—Sunroc Co., Glen Riddle, Pa.			

52-1263 B Dispenser, Drinking Water.—1,000 ea, \$246,150.—Filtrine Mfg. Co., 53 Lexington Ave., Brooklyn 5, N. Y.

Description	Quantity	Invitation No.	Opening Date
52-1263 B Dispenser, Drinking Water.—5,000 ea, \$481,726.—Frigidaire Sales Corp., 300 Taylor Street, Dayton, Ohio.			

The Bureau of Ordnance, Washington 25, D. C.

Description	Quantity	Invitation No.	Opening Date
Air Supply Units.—Crosley Div., Avco Mfg. Corp., Cincinnati, Ohio.			

The U. S. Navy Purchasing Office, 1056 South Santee Street, Los Angeles 16, California

Description	Quantity	Invitation No.	Opening Date
Refrigeration Units.—6 units, \$25,000.—Barker Bros., 793 So. Flower Street, Los Angeles 14, Calif.			

Neumann To Cover East For Federal Refrigerator

WAUKESHA, Wis. — Appointment of John E. Neumann of Springdale, Conn., as exclusive factory representative for Federal Refrigerator Mfg. Co. in New England and several East Coast states has been announced by the company here.

In addition to the New England states, Neumann's territory has been extended to take over that formerly covered by Kenneth C. Millford of Baltimore, and will include the New York City metropolitan area, New Jersey and Delaware, eastern Pennsylvania, New York, and the District of Columbia.

Neumann has had extensive experience in the commercial refrigerated equipment field.



J. E. Neumann

INCORRECT PHOTOS USED IN STORY ON SAN ANTONIO PRODUCE TERMINAL

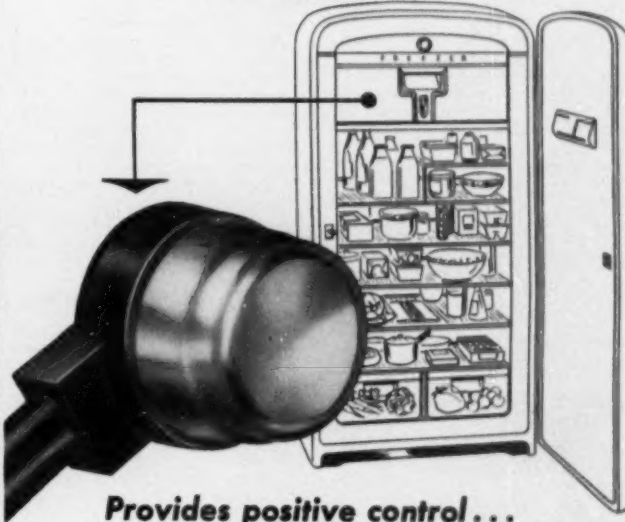
The May 5 issue of AIR CONDITIONING & REFRIGERATION NEWS carried a story on San Antonio's Produce Terminal, on pages 28 and 29. Six installation photographs were used with this story; however, it has been called to our attention by Refrigeration Engineering, Inc., who installed much of the refrigeration equipment on this job, that two of the photographs which were used did not apply to this installation.

The center photograph at the top of page 28 and the right hand photograph at the top of page 29 were photographs of an installation made by Refrigeration Engineering, Inc., of Los Angeles, for Howard and Smith Nursery in Montebello, Calif. The photograph at the top of page 29 (right) is an illustration of the rose storage room, using Recold Delta Coils, of the Howard and Smith Nursery and has no connection with the San Antonio Produce Terminal job.

New KLIXON THERMO-SNAP

Defrosting

THERMOSTAT



Provides positive control... easily installed on Evaporator

Here's the thermostat to solve your "defrost" problems... the new Klixon Thermo-Snap Defrost Thermostat.

This accurate Klixon Thermostat provides positive control regardless of the refrigerator location and its accuracy of operation is unaffected by altitude or cross-ambients. It is easily installed by strapping to the evaporator.

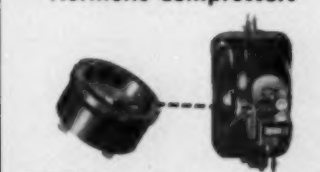
The Klixon Thermo-Snap Defrost Thermostat can be used with a magnetic switch for manual defrosting or with a timer — for automatic defrosting.

Actuated by the scientifically calibrated Spencer Disc, the Klixon Thermostat repeats its temperature performance accurately. Proof — millions of Klixon disc-type thermostats are being used by leading appliance manufacturers.

Klixon Thermo-Snap Defrost Thermostats are now used by a number of major refrigerator manufacturers. Their experiences prove that the accurate repeating temperature control of the Klixon Defrost Thermostat prevents melting of frozen foods during the defrost cycle.

Manufacturers of refrigeration units are invited to find out more about these Klixon products. Write on company letterhead for further information.

KLIXON Dome-Mounted Protectors Prevent Motor Burnouts in Hermetic Compressors



The Klixon protector prevents motor burnouts. It helps to provide dependable refrigeration year in, year out, by guarding the motor from becoming dangerously overheated. It prevents food spoilage, reduces repairs and replacements.

KLIXON

SPENCER THERMOSTAT Division of Metals & Controls Corporation 2406 FOREST STREET ATTLEBORO, MASS.

CLASSIFIED ADVERTISING

RATES for "Positions Wanted" \$5.00 per insertion. Limit 50 words. 10¢ per word over 50.

RATES for all other classifications \$7.50 per insertion. Limit 50 words. 15¢ per word over 50.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words. Other addresses by actual word count. Please send payment with order.

POSITIONS WANTED

SERVICE MANAGER available June 15th. Twenty-five years experience in air conditioning—refrigeration and major appliances. Two years instructor in large vocational school. Ability to handle and train men and manage a service department at a profit. Aggressive and ability to assume responsibility. Would consider a position as factory representative. BOX 4008, Air Conditioning & Refrigeration News.

MANUFACTURERS, WHOLESALERS—Opportunity to obtain man with nineteen years continuous experience in commercial refrigeration field. Familiar with all phases of store engineering and merchandising. Have sold retail, handled distributor organizations, factory branch and national chain accounts. Best references. BOX 4013, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

SERVICE MANAGER, York and Hill Distributor, wants middle aged man with experience in complete field of air conditioning and commercial refrigeration. York products experience preferred but not essential. Must be capable of taking complete charge of service department. Excellent salary and profit sharing. SUPER SUPPLY COMPANY, Greenville, S. C.

HOTEL AND restaurant equipment house needs kitchen and cafeteria sales engineer; capable of lay-out work and selling restaurant-institutional supplies and equipment. This position includes supervisory duties and working with salesmen. Excellent opportunity for experienced hotel and restaurant equipment salesman or sales engineer to step up into supervisory position. SWARTZ AND COMPANY, Roanoke 2, Virginia.

NATIONAL SERVICE manager for rapidly growing package air conditioning manufacturer. Familiarity with manufacturer-distributor-dealer service procedure essential. Applicable mechanical training or experience desirable. BOX 4004, Air Conditioning & Refrigeration News.

REFRIGERATION ENGINEER, degree in engineering preferred with experience in household refrigerator-repairing service. Interesting sales position with large parts manufacturer. Prefer man 30 to 40 years of age. Give all details in first letter. Reply BOX 4005, Air Conditioning & Refrigeration News.

COMMERCIAL REFRIGERATION service man, permanent position with old established firm. Good salary. Open only to highly competent and experienced man. Excellent living and working conditions in one of the most desirable spots for living—southern California. BOX 4008, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

HERE'S YOUR chance to make a buy, limited quantity, 5 ton - 4 row - air conditioning coils with expansion valves, each \$65.50, 12 inch D. I. D. W. blowers for vertical mounting, including pulley, each \$15.25. All merchandise guaranteed and sold only on a be satisfied or your money will be refunded. AIR CONDITIONING ENGINEERING CO., 2116 Locust Street, St. Louis 3, Mo.

FOR SALE—50 ton cooling equipment as follows: with magnetic starters and automatic controls; 2 Frick 4 cylinder Freon compressors 4 1/2 x 4 1/2 Model F.W.-440; 2 40 H.P.—208 volt—3 phase—60 cycle 1750 R.P.M. motors; 5 Aero fin coils, 4 pipes deep, 18 pipes high 8 1/2 x 26"; 1 80 ton Buffalo fan 23" x 42" delivery 20,000 C.F.M.; 3 new American coils model 20300. BOVAL REALTY CO., 312 28th Street, Union City, New Jersey.

552 BUYS standard brand 1/4-HP open type or sealed type complete units. Other sizes up to 3 HP. Write for complete listings on units and parts, including Klixon overload relays @ 15¢. MANN REFRIGERATION SUPPLY CO., 440 Lafayette Street, New York 3, N. Y.

SACRIFICING MODEL FDB18A 18 cu. ft. display freezers with superstructure and Thermopane glass sliding doors. Only \$340 each, f.o.b. New York. List price \$714. For complete details, write or call MANN REFRIGERATION SUPPLY CO., 440 Lafayette St., New York, Gramercy 2-8000.

FOR SALE—brand new 1/2 H.P. hermetic compressors, Model S-88-3/4" high. Complete with relay and overload \$44.50. Send for your list on driers, valves, belts, pressure controls, fittings, relays. Supplies and parts at great savings. Sold on money back guarantee. WALTER W. STARR, 2833 Lincoln Ave., Chicago 13, Illinois.

BUSINESS OPPORTUNITIES

ESTABLISHED COMMERCIAL refrigeration and fixture business, representing the best nationally known lines. Volume over \$500,000 annually, real money maker. Terms to right party. Western Penna. area, serving 300,000 population. Owner retiring. BOX 4012, Air Conditioning & Refrigeration News.

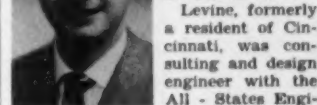
MISCELLANEOUS

"SEALED UNIT Rebuilding-Basic Tools & Methods" now in its third and final printing. This course of trade secrets gives complete information on equipping a shop to handle this work. Information found nowhere else. \$12.50 while supply lasts or write for details. H. CUSTER, Box 98, Center Line, Michigan.

HERMETICALLY SEALED units remanufactured. One year warranty. None all models. Hotpoint, G. E. (bottom units), \$49.50. Coldspot, Frigidaire, Westinghouse, Crosley, Kelvinator, and including 1/2 H.P., \$45.00. Other models priced on request. You ship freight prepaid. Return shipment forwarded C.O.D. NORD HERMETIC CO., 1701 San Leandro Blvd., San Leandro, California.

Mitchell Names Levine Assistant Chief Engineer

CHICAGO—Appointment of Milton Levine to the position of assistant chief engineer of the Air Conditioning Div. of the Mitchell Mfg. Co. was announced recently by Eugene A. Tracey, vice president in charge of the division.



Milton Levine

Levine, formerly a resident of Cincinnati, was consulting and design engineer with the All - States Engineering Co. He also held the position of design engineer on the General Electric jet engine accessories program, and was test engineer for the Kramer-Trenton Co.

A graduate of Cooper-Union university, with a degree of bachelor of mechanical engineering, Levine is a member of Philadelphia chapter of the American Society of Refrigerating Engineers and of the American Society of Heating and Ventilating Engineers.

H-B Instrument Co. To Move To New, Larger Plant

PHILADELPHIA—H-B Instrument Co. will soon occupy its newly acquired plant at American and Bristol Sts., here.

The large up-to-date plant will provide more space for the increased production of mercury plunger relays, thermo-regulators, thermostats, thermometers, psychrometers, hydrometers, and other products which H-B has been manufacturing for over 36 years, the company said.

The larger facilities will also give H-B more room to carry out its stepped-up program of research and development.

This is the fourth move for the H-B Instrument Co.

Dunk & Bright Reopens Expanded Appliance Store

SYRACUSE, N. Y.—Dunk & Bright has reopened its expanded and completely remodeled appliance store at 2468 S. Salina St. The firm has added 2,000 sq. ft. of floor space to its building and has a new entrance and display windows. John Monahan is vice president and Pat Bright, secretary.

CPR Amendment on Freezer Plans -

(Concluded from Page 1, Column 5)
pertaining to freezer-food plans are as follows:

Section 6 (d) is amended to read as follows:

"Selling price and name of cut. When you display a beef cut or certain beef variety meat or beef by-product, the selling price of which is established by this regulation, you must put your selling price per pound and the name of the cut, variety meat or by-product on the display, using the names listed in this regulation."

Section 8 (b) is amended to read as follows:

"Sales of beef and refrigerators or other appliances. On every sale of 25 pounds, or more, of beef in connection with the sale of a refrigerator or other appliance, you must list the names of the beef cuts sold and the price per pound you charge for each beef cut on a document relating to the transaction in such a manner that the price for the beef cuts can be clearly distinguished from the price you charge for other commodities and services, and can be identified as relating only to the sale of beef cuts. You shall give this list to the purchaser."

Section 13 (b) (10) is amended to read as follows:

"Charging, paying, billing or receiving any consideration for or relating to any service, including the extension of credit, in connection with the sale of beef, except as provided in section 13 (c)."

Elsewhere in Washington, most newspapers were declining to accept freezer-food advertising until the local Better Business Bureau ruled on what claims are legitimate and what are not. However, plans were still being promoted via radio and television.

In New York City, the Better Business Bureau issued a list of things for consumers to consider regarding freezer-food plans and also a number of recommendations to guide advertisers and advertising media. The recommendations are similar to those drawn up earlier by bureaus in other cities.

Hugh R. Jackson, bureau president, said the agency had no fault to find as yet with plan advertising in metropolitan newspapers. However, he added, there have been some exaggerations in TV and radio advertising and in ads in some suburban papers.

One of the recent freezer-food ads

run in New York City promoted the F.O.A. (Freezer Owners Association of America, Inc.) food plan. This was a full-page ad published in *The New York Times* by Valmart-New York, Inc.

Meanwhile, the Frozen Food Distributors of Greater New York, the Greater New York Grocers Association, and the New York State Retail Grocers Association continued to work on a plan of their own.

Under this plan, consumers will be able to buy bulk frozen foods direct from the grocer at a discount. About 10% off the retail list will be given for a \$25 purchase, it was said. Distributors will pack home orders separately and deliver them to the grocer. Numerous appliance companies are reportedly tying in with the plan.

In Chicago, the Advertising Checking Bureau, Inc. reported that in the first 1952 quarter, newspaper lineages on freezers in 110 selected cities were nearly three times that of the like period a year ago. The percentage for most of the major brands was substantial, the bureau said.

ASHVE Meeting -

(Concluded from Page 1, Column 4)
G. Huggins, sports; A. H. Morawek, transportation and inspection.

Registration will begin on Sunday, June 15, at 2 p. m. The ASHVE Council will meet on Sunday, and a musicale and tea will be held at 4 p. m. A welcome luncheon will take place on Monday, June 16. The semi-annual banquet will be Wednesday evening.

The technical program is as follows:

MONDAY, JUNE 16

"Experimental Data on Drying Atmospheric Air for a Supersonic Wind Tunnel," by W. E. Emley, Jr.

"Quantitative Treatment of Dust Measurement by Discoloration Method," by A. B. Hubbard.

"Effectiveness and Temperature Requirements for Cooling Panels Removing Internal Radiation," by Merl Baker.

TUESDAY, JUNE 17

"Moisture Migration in a Guarded Hot Plate," by N. B. Hutcheon and J. A. Paxton.

"Cooling Load from Sunlit Glass," by C. O. Mackey and N. R. Gay.

"A Study of Transient Heat Method for Measuring Thermal Conductivity," by D. D'Eustachio and R. E. Schreiner.

"A Low-Inertia Low-Resistance Heat Flow Meter," by R. G. Hueb-scher, L. F. Schutrum, and G. V. Parmelee.

WEDNESDAY, JUNE 18

"Outlet Turbulence Intensity as a Factor in Isothermal-Jet Flow," by H. B. Nottage, J. G. Slaby, and W. P. Gojsza.

"Exploration of a Chilled Jet," by H. B. Nottage, J. G. Slaby, and W. P. Gojsza.

"The Shading of Sunlit Glass: An Analysis of the Effect of Uniformly Spaced Flat Opaque Slats," by G. V. Parmelee and W. W. Aubele.

"A Smoke-Filament Technique for Experimental Research in Room Air Distribution," by H. B. Nottage, J. G. Slaby, and W. P. Gojsza.

McDaniel Named -

(Concluded from Page 1, Column 4)
phases of merchandising, including advertising, sales promotion, and sales training.

McDaniel's entire business career has been with Hotpoint since 1934.

He has had extensive background in district offices as well as in the Chicago headquarters staff. Field positions included Texas, San Francisco, and Seattle.

In 1948 McDaniel became assistant sales manager, moving up to sales manager in 1951.

W. Homer Reeve Elected Easy President Following Death of H. P. Nelligan

SYRACUSE, N. Y.—W. Homer Reeve was elected president and a director of Easy Washing Machine Corp. at a recent special meeting of the board of directors.

He replaces H. Paul Nelligan who died suddenly May 17. Nelligan, who was 49, had been strenuously engaged in the defense production program of his company for the past year. He was stricken with a heart attack while at work.

At a board meeting, Mrs. Genevieve D. Nelligan, wife of the former president, and T. Frank Dolan, president and treasurer of Edward Joy Co., Syracuse, were also named directors.

Reeve, prior to his election as president, was vice president and general sales manager of the company. He has been with Easy for 12 years. Before joining the corporation, he was associated with Frigidaire in a sales and sales management capacity.

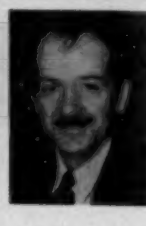
Thermco Appointed Duchess New England Outlet

ALLIANCE, Ohio — Jules Alexandre, sales manager for Duchess Appliance Mfg. Co. here, has announced the appointment of Thermco Sales, Inc., Concord, Mass., to represent Duchess products in the New England states.

Jack B. Zumwalt, Sr. is president of Thermco, with Larry H. Holman, general manager.



F. J. HAUSELD



J. S. PALMER



A. R. EDWARDS



J. A. GALAZZI

International Harvester Changes -

(Concluded from Page 1, Column 2)
facturing operations of the refrigeration division.

Three other appointments affecting refrigeration personnel were also announced. J. S. Palmer, formerly chief engineer of the product engineering group has been appointed chief engineer of the advanced design group.

A. R. Edwards, assistant chief engineer of the experimental and test group, and J. A. Galazzi, assistant chief engineer of the product engineering group, have been named chief engineers of their respective groups.

Keeler has been general manager of the refrigeration division since April, 1950. In 1945 he had become the first works manager of the company's new refrigeration plant and was named manager of manufacturing for the division three years later, holding that post until his promotion to general manager.

Keeler started with Harvester in 1929 as a time and motion study man at the West Pullman works and has remained with the firm ever since.

Harris, the new general manager,

has been with the refrigeration division since it was formed in 1944. His first position with Harvester was manager of production engineering for the engineering division. In 1945 he was named manager of manufacturing for the division, and, in 1947, manager of engineering.

Before coming to International Harvester he had worked with the Crosley Corp. and the Frigidaire Div. of General Motors Corp. He has been in refrigeration manufacturing and engineering for 21 years.

Hausfeld, the new manager of engineering, is a veteran of 26 years in refrigeration. He joined Harvester in 1945 after nearly 20 years with Frigidaire. His first position with Harvester was mechanical engineer at the Evansville works. In 1946 he became planning engineer and in 1948 staff assistant to the works manager.

JUST ASK US!

Turn to "What's New" Page for useful information on new products.

GENERAL SERVICE MANAGER

Leading comm'l refrig. manufacturer with National retail sales organization requires high caliber general service manager to develop national service organization. Experience essential in engineering and production liaison, servicemen training, service manuals, procedures, and accounting. Position requires travel. High potential in compensation and opportunity for advancement. Send resume of personal and business history to Box 4010, Air Conditioning & Refrigeration News.

CHIEF PRODUCT ENGINEER

Chief Product Engineer wanted by national manufacturer of commercial refrigeration. Full responsibility for product development, research, design, laboratory testing, and inspection. High level compensation for qualified man. Mail resume of experience to Box 4011, Air Conditioning & Refrigeration News.

SALES POSITION AVAILABLE

The General Electric Company has requests from several well established distributors of its commercial packaged air conditioners for capable salesmen to fill well-paying year-round positions in the larger cities. Interview will be arranged locally. Send summary of experience to General Electric Company, Dept. H, Air Conditioning Division, Bloomfield, New Jersey. Replies will be kept in confidence.

Save both ways...

IN INSTALLATION COSTS • IN OPERATING COSTS

EVAPORATIVE CONDENSERS • COOLING TOWERS



... Evaporative Condensers and Cooling Towers offer the important "extras", in many ways, extras that will increase your profit.

... low head room required and small floor space. The compact design of the Bush units permits installation in larger units permit movement of the units without costly re-building. The units are designed for maximum efficiency and low operating costs. Bulletin 510 describes the many advantages of the Bush units.

Bush Manufacturing Company

WEST HARTFORD 10, CONNECTICUT



Since 1907